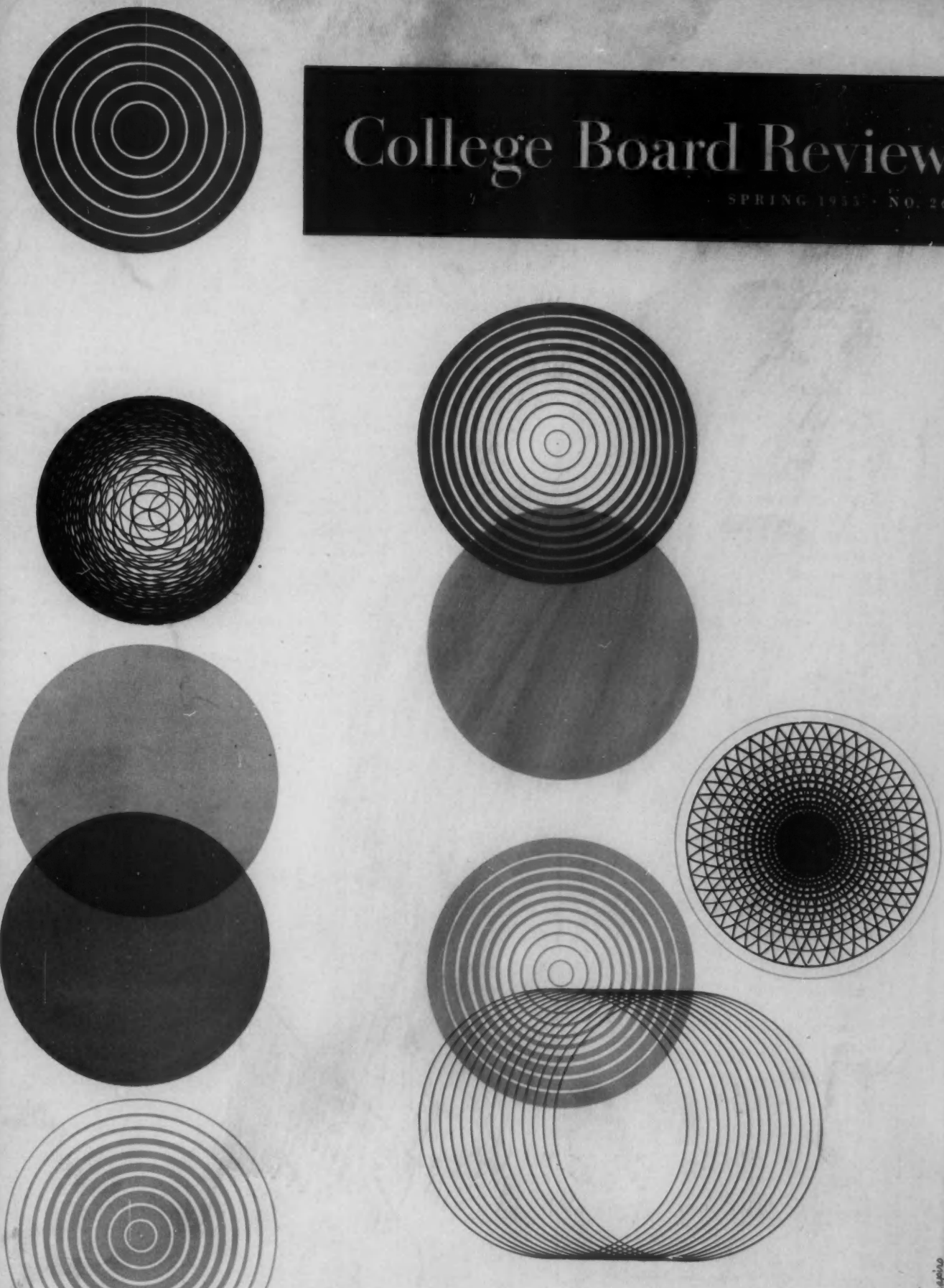
College Board Review

SPRING 1953 · NO. 26



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The College Entrance Examination Board is composed of 166 member colleges and 22 member associations. Each member college has two representatives on the Board. Member associations have from one to five representatives. Members and their representatives are listed in the *Report of the Director*. Meetings of the Board are held on the first Wednesday in April and the last Wednesday in October.

College Board Review subscription: $1.00 per year; single copy: $.50. Subscription offices: College Entrance Examination Board c/o Educational Testing Service, P. O. Box 592, Princeton, N. J., or P. O. Box 27896, Los Angeles 27, Calif.

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College Board Review

News and Research of the College Entrance Examination Board published three times a year by the College Entrance Examination Board 425 West 117th Street, New York 27, N. Y.

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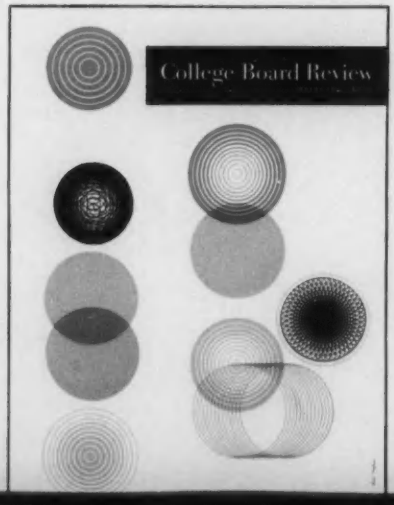

Illustrations: Dan Shapiro's cover, he says, represents "Multiple Choice," not the system of testing described as Ptolemaic by William C. Fels on page 13. A slightly more historical view of multiple choice is presented by Stanley Wyatt on page 17. And a slightly more astronomical view of testing by Vincent Malta on page 14. Photographs of the April 6 College Board meeting appear through the courtesy of Triple-X film, a 1.4 *f.* lens, and the talented eye of George Zimbel.

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Reminiscences (Spring 1955)
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NEWS OF THE COLLEGE BOARD

Advanced Placement Tests

Date and fee set: The series of 12 Advanced Placement Tests to be offered by the College Board for the first time next spring will be administered during the week of May 7, 1956. The fee will be $10 for each test.

The tests were developed by the School and College Study of Admission with Advanced Standing on an experimental basis during the past three years. Their continuation in the College Board program was made possible through a grant of $50,000 from the Fund for the Advancement of Education, sponsor of the Advanced Standing project and such other experimental efforts to improve the transition of able students from schools to colleges as the School and College Study of General Education and the Early Admission to College Program.

It is expected that approximately 1,000 candidates will register for an average of two tests in the first year. The number of students will increase gradually as those schools able to offer superior training and colleges which wish to encourage it by accepting students with advanced standing become more familiar with the use of the tests. They enable students to demonstrate their readiness to begin certain college courses at the sophomore level, thus avoiding the necessity of spending time on subjects in which they have already shown proficiency and receiving encouragement to pursue their interests at once. Whether or not academic point credit, as well as advanced placement, will be granted will be decided by the individual college.

The 12 fields in which tests will be given next May are American History, Biology, Chemistry, Composition, European History, French, German, Latin, Literature, Mathematics, Physics, and Spanish. A general announcement of the program was sent this month to schools and colleges which use the Board's tests and to individuals and organizations who have expressed interest in the tests. A bulletin of information providing directions for registering and brief descriptions of the tests will be available to candidates and schools in the fall. School and college requests for more detailed information should be addressed to College Entrance Examination Board, c/o Educational Testing Service, P. O. Box 592, Princeton, New Jersey, or P. O. Box 27896, Los Angeles 27, California.

Membership changes

New members: The addition of four colleges elected at the spring meeting of the College Board increased the Board's membership to 166 institutions. The new members are Lawrence College, Newton College of the Sacred Heart, Notre Dame College of Staten Island, and Yeshiva University.

At that time the privileges of membership were also extended to the United States Military Academy, which fulfills all Board requirements but does not hold formal membership in any civilian organization. The Academy has announced that candidates nominated subsequent to July 1, 1955 will take the Scholastic Aptitude Test and the Achievement Tests in Intermediate Mathematics and English Composition in place of the mental entrance examinations formerly required. Applicants with acceptable college records may be exempted from the Achievement Tests.

The change in West Point test requirements will enable candidates to follow regular Board procedures in registering for and taking the tests. Their scores will be sent to the Academy and to any other colleges they name. Those holding or anticipating Congressional nominations, usually about 85 per cent of the entering class, will be encouraged to register for either the December or January testing date. All competitive candidates will be required to take the tests on the March administration date when they will be given at selected Army and Air Force installations as well as at some 700 Board examination centers.

Increased representation: Adjustment of the Board's organizational framework to insure its continuation as a body representative of schools and colleges was accomplished in part at the spring meeting by amending the Articles of Association to enlarge the Executive Committee.

The increase from the present nine elected committee members to 15 by October 1957 will be accomplished by the election to three-year terms of five new members each fall. They will be chosen on the basis of at least three from colleges and at least one from schools.

A further step to strengthen the function of the schools by increasing the number of regional association representatives and representatives-at-large has been recommended by the Committee on Membership and will be presented to the Board for action at its fall meeting. The recommendation notes that due to a rapid growth in college membership the ratio of school representation to total Board membership has changed from about 1 to 3 to about 1 to 4. In urging that the former ratio be restored, the committee specified that representation should reflect the proportion of Board candidates from public and independent schools, that it should also be apportioned according to the number of candidates attending schools in each region, and that the number of representatives-at-

large should be increased. It pointed out that the present proportion of school representatives is approximately 58 per cent independent and 42 per cent public although the candidate distribution is close to the reverse of this. The stability of the percentages of candidates attending schools in different regions during the last five years, a period of large increases in their numbers, is indicated in the accompanying table from the 53rd *Report of the Director*.

Percentage of candidates attending schools in each geographical section

Geographical section	Percentage of candidates				
	1950	*1951*	*1952*	*1953*	*1954*
New England	24.5	23.8	22.5	22.7	21.9
Middle Atlantic	46.0	47.7	48.3	48.8	48.5
South Atlantic	6.1	6.3	6.8	6.7	7.1
East North Central	6.0	6.4	6.6	6.5	6.7
West North Central	2.0	2.1	2.2	2.2	2.1
East South Central	0.8	0.9	0.9	0.9	1.1
West South Central	1.3	1.4	1.5	1.5	1.6
Mountain	0.8	1.0	1.0	1.1	1.3
Pacific	4.9	5.4	6.3	6.0	6.0
Foreign	1.0	1.2	1.7	1.4	1.3
Unknown	6.6	3.8	2.2	2.2	2.4
TOTAL	100.0	100.0	100.0	100.0	100.0
Number of candidates on which percentages are based	75,633	75,244	88,721	102,748	129,636

Requirements studied: A canvass of member colleges to determine their membership eligibility in terms of the "regular and substantial use" of the Board's tests which will be required by October 1958 has clarified the definition of that requirement and revealed that its application to tax-supported institutions needs further study.

The general standard that regular and substantial use of the tests can be measured at the minimum as either the Scholastic Aptitude Test or the Achievement Tests taken by 90 per cent of a college's freshman class was adopted by the Committee on Membership after all member institutions had reported the extent of their present and proposed use of the Board program. The survey showed that 112 of the 162 members now meet that standard and that 23 others expect to comply with it by 1958. Of the remainder, 15 colleges were undecided and 12 thought it unlikely that they would fulfill the requirement by that time.

The committee has stated that it does not intend to apply the definition rigidly or mechanically, noting that exceptions may be warranted because of special or local conditions. Among these, the tax-supported institutions in general constitute a group of special cases whose particular problems are now being considered by a subcommittee. These and all other member colleges whose responses suggest that they may be disqualified by 1958 have received this assurance and the offer of assistance from the Board's staff.

1955 Colloquium

Theme is school-college ties: School and college officers have been invited to spend four days in a cooperative exploration of their common problems at the fall College Board Colloquium on College Admissions. The group of approximately 100 admissions officers, school administrators, and other specialists will arrive at Arden House in Harriman, New York, on October 21 to begin a program of classroom sessions and informal discussions which will end the afternoon before the Board meets in New York City on October 26.

The Colloquium will concentrate on the relationships existing between college admissions criteria and the studies offered by schools and colleges. This will involve consideration of different kinds of schools and colleges and the ways in which students move from one pattern of education to another. Other areas studied will be the various academic criteria by which college applicants are measured, the effects of guidance and financial, personal, and extracurricular factors, and the presentation of methods which would help schools and colleges to communicate more effectively.

Publications

New Handbook: A revised edition of the *College Handbook* will appear early in the fall. The new volume, which will replace material submitted for publication two years ago, will offer up-to-date statements of their offerings, requirements, expenses, and financial aids from all College Board member colleges. The *Handbook* section on scholarship programs will be expanded and a new section listing colleges which have programs of early admission and advanced placement will be added. The condensed table of test requirements and preferred testing and application dates will also appear in the revised edition. An order form on which the *Handbook* may be ordered will be included in the announcement of 1955-56 publications to be sent to schools, colleges, and *Review* subscribers in September.

Colloquium in print: All the discussions of the 1954 Colloquium on College Admissions are now available in *College Admissions No. 2* at $3.50 per copy. The first book in this series, *College Admissions*, is now being reprinted in response to requests and may be ordered at $3.95 per copy. Another book which was prepared for the 1954 Colloquium, a 350-page collection of documents from 12 colleges entitled *Freshman Admissions Forms and Letters*, has also been reprinted and may be ordered at $3.00 per copy. For descriptions of these books and an order form see page 25.

How to use Board scores: The successor to *College Board Scores No. 1*, the score interpretation manual prepared expressly for school and college officers without technical training in test use, will be mailed in June to those who have ordered it during the year. It will be offered to other interested persons through the publications announcement which will be mailed to schools and colleges in the fall.

A limited supply of *College Board Scores No. 1* will remain after the sec-

ond edition of this manual is published. These copies will be sent without charge to school administrators and guidance officers and to college teachers in the fields of tests and measurements and of guidance for distribution to their students. Requests for copies should be addressed to College Entrance Examination Board, c/o Educational Testing Service, P. O. Box 592, Princeton, New Jersey, or P. O. Box 27896, Los Angeles 27, California.

Staff additions

Four named: The appointment of S. A. Kendrick as Associate Director of the College Board, Rexford G. Moon and George H. Hanford as Assistants to the Director, and Herman W. Campbell as a member of the Board's editorial staff were recently announced by Director Frank H. Bowles.

Mr. Kendrick, who is currently director of publications of the National Commission on Teacher Education and Professional Standards, National Education Association, will be in charge of test planning and development when he joins the Board in August. His former posts have included counseling and admissions duties at George W. Peabody College, Vanderbilt University, and Harvard University Graduate School of Business Administration.

Mr. Moon, now associate director of admissions, Union College, will supervise College Scholarship Service operations, relieving Assistant Director Richard G. King for work in test use and interpretation. Mr. Hanford, treasurer of North Shore Country Day School, Winnetka, Illinois, will serve as general operations officer in the analysis and planning of Board activities. Mr. Campbell, most recently associated with the Atomic Energy Commission, has been on the Board's editorial staff since December.

September SAT

Change of plan: The September 7 administration of the Scholastic Aptitude Test announced in the fall issue of the *Review* was rescinded by the College Board at its April 6 meeting. It was replaced by a plan under which the test will be given on dates selected by those member colleges which need to test applicants not tested at one of the regular administrations. This action was the result of a poll which showed that interested colleges did not favor September 7 and were not in agreement on any other single date.

Under the new plan, the SAT may be given on any one day in September if all member colleges in the same area offer it on that date. The administration will be limited to colleges which require the test of substantially all their candidates and will be open only to candidates for admission that month at those colleges. The customary fee of six dollars will be charged.

General Composition Test

Continued one year: Regular administration of the General Composition Test in May 1956 has been approved on recommendation of the Committee on Examinations. Otherwise the experiment would have ended this month with the second administration of a two-year trial period. Authorization to continue the test permits further research which will complete information needed before a definitive judgment on the test can be made. A complete report on the findings available to date appeared in the winter issue of the *Review*.

Transfer Test lapses

The five-year history of the College Transfer Test came to an end this May 21, after which it was retired from the College Board program as little used and less useful. A vestige of the 1950 Intermediate Tests for College Students, the test was originally known as the College Ability Test, an aptitude type partner of the subject matter College Proficiency Tests for college freshmen and sophomores.

In its first year the CTT was taken by 1,306 students who wished to transfer from one college to another. Each year since then the number has increased by about 500. The fact that the increase was small prompted the inquiry that the Scholastic Aptitude test might do the job of prediction as well or better. When this was found to be the case, the Board voted that the CTT should be discontinued. To serve its purpose, special SAT norms for transfer students are now being developed.

New program proposals

Ptolemaic and Copernican: Two different suggestions for dealing with problems created by the increasing number of Board candidates and the growing complexity of the testing program will be studied during the next few months. Both were reported to the Board in preliminary form on April 6 by Associate Director William C. Fels (see pages 13-16).

The first proposal, presented as a "Ptolemaic" stopgap solution to pressing administrative difficulties, envisions additional testing dates during the year and on certain dates the offering of only the Scholastic Aptitude Test or the Achievement Tests. A simplified registration and examination center procedure would accommodate most candidates as late as the testing day itself.

The more far-reaching "Copernican" approach proposes a sequence of tests beginning with a much more general and less costly use of the Scholastic Aptitude Test in combination with school grades for talent identification. This would be followed in time, if colleges wished to use them, by the Tests of Developed Ability as a finer admission measurement, and then by the Achievement and Advanced Placement Tests for placement of admitted candidates.

School transcript: The desirability of a uniform school transcript has been pointed out by many schools, as well as colleges, and the establishment of a service which would provide and process such a form is now being considered by the College Board (see page 15). The form would not constitute an application for admission but would provide a report of the student's school record. The school would send the form to the transcript service, which would prepare copies for colleges named by the student.

New goals for college admissions

Social demands on schools and colleges

BY FRANK H. BOWLES

This report and the two papers which follow describe the tasks of the College Board with particular attention to the causes and effects of its present and possible future operations. When the program is thus considered as a complex of functions, it becomes apparent that no current admissions problem can be treated as a single problem which may be simply solved by single-minded administrative action. Until we learn, for example, what made such a phenomenon as the multiple applications problem appear some 10 years ago and until we explore the next 10 years to learn whether the causative factors are likely to make the problem more or less serious during that period, we cannot know whether the structure of American education 10 or 20 years hence will make possible an educational rather than an administrative solution.

Speculations on the probable form and structure of American education in the next 20 years may well take a lesson, if not a page, from the history of the past 80 years. During the 40-year period 1870 to 1910, our population grew from 40 to 92 million, or 130%. During this same period, the number of college graduates increased from 9,300 to 34,200—or 260%. In 1910, at the close of this period, 85% of all college graduates were in the fields of liberal arts, health, or law, with 5% in engineering and 10% in other activities. This, then, was a period in which there was a clear and definite relationship between population growth and college enrollments in the ratio of 1 to 2. It was also a period when our colleges and universities were producing graduates to serve in four major areas: teaching, the ministry, medicine, and law.

During the second 40-year period, the population increased from 92 million to 151 million—65%—while the number of college graduates rose from 34,200 to 434,000. Since the latter figure is skewed by veteran enrollments, we can correct it, conservatively, to 260,000. Using the latter figure, we find that the increase was 660%, which means that during this period college enrollments increased at 10 times the rate of population increase. At the close of this period, only 42% of all college graduates were in the liberal arts, health fields, and law, and nearly 40% were distributed between two fields which didn't even appear in the 1910 distributions—education and business. The remaining 20% were distributed between engineering, with 10%; applied biology (principally agriculture) with 5%; and all other fields with 5%.

Social cause, educational effect

This was a period in which the development of higher institutions bore no direct relationship to population growth, and during which there were changes in the form and structure of American higher education which could not possibly have been predicted from the 1910 figures. These changes meant that higher education was no longer concerned only with preparation for four professions but had so shifted in its course that the liberal arts plus important professions of 1910 accounted for less than half of our educational effort, and all the rest of that effort was going into professions that were not considered in terms of higher education 40 years before.

These figures have important meanings for college admissions. They show that population increase is related to enrollment increase, but is obviously not a determining factor. They suggest that we must look elsewhere for the determining factor.

If these two 40-year periods are compared to find the determining factor, the difference appears to lie in the extent of accomplished social change. I stress *accomplished* social change because while the period 1870 to 1910 was one in which great changes were in the making, it was not in itself marked by great change. Those changes came after 1910—many of them after the first war—and when they came they were all-embracing—technological, economic, and social. I suggest that it was these changes which brought about corresponding changes in the form, structure, and indeed, very purpose of higher institutions. Certainly, the figures show a fundamental shift in the offerings and nature of our institutions, moving from emphasis on the liberal arts in the training of a small professional class to emphasis on training in such newly-important professions and occupations as secondary school teaching, management, construction, merchandising, and agriculture, and a whole host of such service professions as nursing, medical technology, communications, accountancy, library service, transportation, and public administration.

In looking for a base line on which to develop predictions of the next 20 years, we will probably be on much safer ground to consider them as the continuation of the past 40 years than to make plans in terms of a basic 1 to 1 or even 1 to 2 relationship between population growth and enroll-

ment increase. Although a careful and even prayerful consideration of growth figures over the last 40 years is recommended, I do not suggest that college enrollments are going to increase at 10 times the rate of population growth as they did during those years. This apparent conservatism is based on a theory regarding the development of our secondary schools.

The fact that in 1900 some 75% of secondary school graduates went to college actually proves nothing—except that our secondary school system in 1900 was very incomplete. Since the reasons why it was incomplete would take some time to explore, and under any circumstances are not germane to the purpose of this discussion, which is projection rather than history, I will leave that statement to stand bold and unsupported. Let us instead consider the development of secondary education in the twentieth century.

Education for all–and everything

My theory (it cannot be blamed on or attributed to anyone else) is that since 1900 we not only have built, but substantially completed, a system and structure of secondary education based on a reasoned and accepted concept of education. A curriculum has been established in terms of that concept. A teaching and administrative organization has been trained in that concept and is prepared, at least for the next generation, to perpetuate it.

We have adopted the principle that all Americans are entitled to the opportunity of finishing secondary school as part of the process of coming of age in America and have structured the secondary school curriculum to match that concept. This has meant that secondary schools have discarded certain tasks they once performed. One of these tasks, the most important from the standpoint of the colleges, was that of exact preparation for college. Another which was related to but not the same as the first function was introduction to the study of certain of the more exacting disciplines such as foreign languages, mathematics, and science. In place of these discarded tasks, the secondary schools have assumed the more difficult job of offering a comprehensive curriculum which presents, on a sampling basis, a form of preparation for almost any occupation—including that of student—which a secondary school graduate might elect to enter. An important by-product of this change is the fact that the educational and cultural opportunities available today in secondary schools are on the whole vastly wider and richer than the educational and cultural opportunities available in our colleges at the beginning of this century. This statement holds true, unfortunately, with respect to some colleges today and may explain the puzzling enrollment problems of certain colleges.

Another result far more than just a by-product, is that the colleges are now dealing with a new order of college preparation which will no longer deal in depth with such disciplines as the foreign languages, science, mathematics, and English composition. There is no reason to hope or expect any marked change in that new order of preparation, at least within the generation with which we are now concerned.

Still another consequence of the schools' shift in educational direction has been to introduce the need for guidance, a new tool of administration which we have barely begun to use. Guidance depends on evaluations of abilities, achievements, and interests over and above the sketchy indications in these areas which now emerge from records based on school and college studies. Both the need for development of this tool and our failure to use it in its present form are evidenced by the wastage in freshman classes today. If we can develop and apply good counseling, we can go a long way toward

Director Frank H. Bowles answers questions following above address to Board at spring meeting, April 6

better use of the educational system, and in the process we may be able to modify college admissions to reduce some of its present problems.

Changes in higher education which are indicators for the future also have a bearing on the nature of the Bachelor of Arts program itself. In noting that the A.B. program which, with its attendant professions of law and medicine, dominated the American college curriculum in 1910 has today dropped off to the point where fewer than half our graduates receive what we call liberal arts education, we can say that the technical specialties and the newer professions have been developed at the expense of the A.B. program. Since it seems reasonable to expect that emphasis on technical and professional education will continue to increase, not only through the continuance of present programs but through the development of additional programs not now foreseen, the percentage of students following the liberal arts will probably continue to decline until it approaches as a limit the number of individuals required for the senior professions of college teacher, research scientist, lawyer, physician, and for executive posts in government and industry. At the same time the number of students following programs in the technical specialties and the newer professions will tend to rise, its limit being determined by the number of individuals required for all other occupations complex enough to require preparation extending to four or five years of higher education.

Future of the liberal arts

This trend is not a matter of unalloyed gloom for the future of the liberal arts. While the liberal arts curriculum has been decreasing in popularity by reason of the development of narrower technical and professional programs,[1] liberal arts studies have been injected in increasing amounts into these specialized programs to such an extent that they are certainly hold-

[1]Another profound change in the liberal arts offerings which provides an interesting parallel to changes in the secondary school curriculum is their shift in emphasis from studies which relate to the development of our culture, such as the classics, history, and philosophy, to emphasis on its contemporary aspects.

Vice President Needham, Simmons

President O'Byrne, Manhattanville

Financial Aid Director Monro, Harvard

Board meeting

The College Board is a cooperative activity in which the representatives of its member colleges and educational associations come together twice a year to hear reports, vote on proposals, present ideas—and ask questions.

Before any idea can become a part of the program it is subjected to inquiry—and frequently to challenge—through a series of subcommittee and committee discussions. The proposals which survive, and often they change greatly in the process, reach the penultimate trial in the semi-annual sessions of the Executive Committee. The only test which really counts, however, is when the idea is presented on the floor of the Board itself and the Chairman asks if there is any discussion. There and then the plan may be —and usually is—accepted wholly, but it can be severely amended, postponed, contested by vote, or cast out altogether. There, also, it is possible in theory, but unlikely in practice, because of the respect with which the members regard the committee structure, to short-circuit this system of screening and review by introducing an idea and pressing for its immediate adoption. Customarily, a suggestion contributed by a member or offered in a staff report to the Board for discussion, such as the papers which appear on pages 4-16, is referred to the committees and returned to the Board at a later meeting with their recommendations.

The chief decision-making respon-

Admission Director Wilson, Amherst

Television: Dean Hafer, Syracuse

Examinations: Dean Meder, Rutgers

sibilities of the Board this year have been divided among 14 committees in addition to the committees of examiners who prepare the tests. The committee membership, which ordinarily involves at least two meetings a year and considerable homework, is entirely volunteer in character, although those who serve do receive their traveling expenses. The committee members include five college presidents, three vice presidents, 43 deans and directors of admissions, 10 professors, and 19 school principals and headmasters. They are invited to serve on the bases of the excellence with which they serve their institutions, their interest and degree of participation in College Board activities, and the knowledge of public or independent school or college education which they can bring to bear on Board affairs. The regular standing committees, in addition to the Executive Committee, which is empowered to act in behalf of the Board when necessary, are those on Examinations, Membership, Nominations, and Research and Development. Others appointed for special and usually temporary purposes, including subcommittees acting within the areas of standing committees, are those on Scholarship Policy, West Coast Member Colleges, Colloquium on College Admissions, Advanced Placement Tests, Secondary School Representation, Tax-Supported Institutions, Preliminary Testing, Scholarship Service Operations, Multiple Applications, and Television.

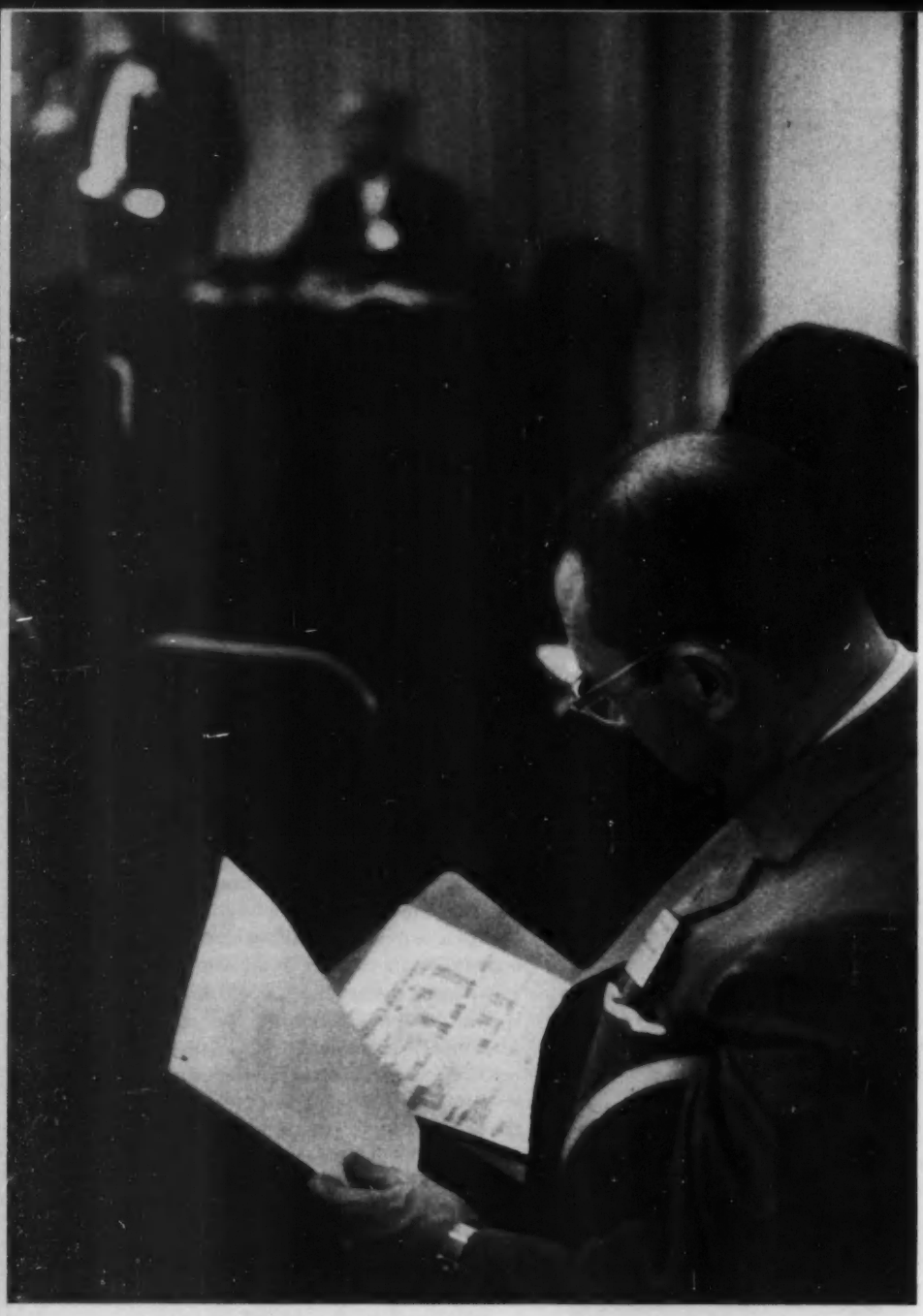
Finance: Comptroller Kirkpatrick, University of Chicago

Membership: President Kraushaar, Goucher

ing their own in higher education today and will undoubtedly persevere in the future.

It is pertinent to observe that teacher education is moving toward a merger with and absorption in liberal arts education. This may not be apparent, but when we consider that teacher education (primary, secondary, and specialized) has been recognized as higher education only within the last 25 years and is even now receiving this recognition only grudgingly, the progress looks pretty rapid. It has recently been speeded up by some liberal arts colleges through their development of teacher education programs. It would speed up a lot faster if our leading teacher training institutions would take a collective deep breath and exhale some of the repetitious courses in pedagogy and methods so that they could strengthen their subject-matter offerings. Sooner or later this will happen. When it does, it will change the emphasis on liberal arts throughout the field of higher education.

If my thesis that social change is the determinant in educational change is correct, it will follow that we must expect much more in the way of educational change, since our nation is still in the midst of social change. This thesis is borne out by the fact that new college enrollments for the past several years have increased, despite the fact that the size of the age groups from which this new enrollment has been drawn has not increased. It is also borne out by the fact that the pressure on College Board member institutions, which by and large offer the best and widest opportunities in the technical and professional fields as well as in the liberal arts, have increased much more than the pressures on colleges outside of the Board's membership. Part of this proof is to be found in our candidate figures, which have zoomed from 75,000 in 1951 to an estimated 160,000 for the current year. A further comparison of those years shows that whereas in 1951 the Board examined 10% of all final candidates for admission to college, it is today examining over 15%. Membership has, of course, increased during that period from 124 institutions to 162, but even this sizable growth in College Board member colleges



Representative-at-large Justin Brierly peruses budget at Board meeting

does not explain such a phenomenal rise in the number of candidates.

Parenthetically, it may be noted that we are four years ahead of our projections of the use of Board tests. If the rate persists, we may reasonably expect from 180,000 to 200,000 candidates next year. I decline to make a prediction beyond next year since we have so obviously run off our projection tables that the work load will have to be restudied before further speculation can be undertaken. Using the present rate of increase in our candidates, as a basis, however, we would be justified in planning for 400,000 candidates by 1962, of whom 300,000 would be final candidates. This figure, if realized, would be 37% of all college entrants predicted for that year.

Many degree avenues

It seems clear that we are laboring in the midst of a maze which is formed by a multiplication of the avenues leading to a college degree. This multiplication, multiplied in turn by the variety of institutions offering these choices, has created, to put it mildly, a serious problem of selection. The growth in "popularity" of College Board tests is an indication that they are regarded as the best selection device available. Questions concerning the Board's program, administration, and plans all arise from these facts.

The multiple application problem arises essentially from a shortage of spaces in the nation's leading colleges and universities, and the problem of applicant "ghosts" arises from overstimulation of potential candidates for admission. The scholarship problem arises from a shortage of really superior talent, and the clerical problems that are beginning to plague colleges, schools, and candidates alike stem from the proliferation of requirements which attempt to fix the candidates in place so that they will hold still long enough to be considered, evaluated, admitted, and registered.

More specialized tests

Questions concerning the real values of Board tests as multipurpose selection instruments have not been explored and answered, but the general feeling is that further developments, perhaps of more specialized instruments, are indicated at least for certain selection problems. At the same time that consideration is given to such matters, we are aware that the present tests are not being used to full advantage by more than a few of the institutions that receive the scores.

In addition to these questions, there are very real problems arising from sheer numbers of candidates which put unexpected strains on the testing program and thereby introduce technical problems of scaling, equating, scoring, test development, and test administration which are really unprecedented in the history of testing.

Over and above all of these problems is the fact that college admissions, which was at one time largely a specialized public relations job, is becoming increasingly a form of guidance involving competence not only in the evaluation of credentials but in the far more difficult task of the evaluation of individuals.

Finally, we come to the fact that in the basic relationship between second-

ary school and college, the colleges have permitted themselves to be moved into the defensive position of attempting to maintain the status quo during a period when the secondary schools have moved forward to offer more opportunities to an ever-increasing proportion of the population. Unless and until the colleges can succeed in getting a general understanding of their purpose, operation, and standards which will be at least as clear as the present general understanding concerning the purpose, operation, and standards of the secondary schools, the uncertainties that surround college attendance will continue and will bear with particular pressure upon the point at which students pass from one segment to the other.

The educational function of financial aid

BY RICHARD G. KING

In the preceding pages, Mr. Bowles has called attention to some staggering numerical facts about the size of present and future college enrollments. The president of a small college would be able to report some equally staggering statistics about the present size of the dollar. The colleges are now aware that the enrollment growing pains and the dollar shrinking pains are symptomatic not only of population growth and a postwar boom, but also of a more basic social and technological metamorphosis.

As recently as 20 years ago, the college-bound youngster felt called upon to explain to his less fortunate high school classmate why he was going to college. More often than not, his half-apology was really an attempt to explain why his family happened to have the wherewithal to send him to college at all. A few less favored but more stout-hearted youths shouldered the burden themselves, Horatio Alger style, and a few managed to avail themselves of the new scholarship money just beginning to be used by colleges aspiring to become (or remain) "national" colleges—or to fill dormitory spaces. But the number of scholarship students was still small, the Secretary of the College Board reporting only 600 winners among Board member colleges in 1934, and scholarship holders were often objects of mild curiosity on campus.

Six years later 3,500 scholarship competitors were taking College Board tests and administrators were discovering what a useful tool the scholarship could be in engineering a freshman class more nearly to faculty (and alumni) specifications. World War II and the GI Bill enabled colleges to husband their modestly growing scholarship funds, but the superb performance of a remarkably diversified veterans' group served only to increase the desire of admissions officers and faculty alike to spend those funds. And spend them they have.

Unfortunately, the thrill of seeing an acceptance letter from "that wonderful boy from Winnetka" has all too often overridden the fact that the Winnetka boy, however wonderful, is being offered more than enough to get to college by several different colleges. It is easy to overlook the fact that the last four or five hundred dollars of his stipend, which might be bread and butter for a worthy local commuter, is only the beer and cider of a large intercollegiate rushing system for him.

As the war reserves of scholarship money have dwindled and disappeared, as costs and tuitions have risen, and as larger and larger percentages of scholarship money have come from general operating funds, faculties have come to the realization that embellishment scholarships are coming out of unfulfilled salary raises. It is equally distressing that many highly promising (if not so glamorous) needy students are either not coming to college at all or are shifting their academic sights and going to night colleges and trade schools.

Many a college dean could boast in the thirties that no able but needy student was ever denied the privilege of attending his college. After all, the needy student frequently didn't even bother to apply. Now that the GI Bill, the state university, and a generally increased income level have made the public aware that good higher education can be put within the reach of the many, the admissions officer in the independent college has often found himself financially embarrassed, institutionally speaking, not because of a smaller scholarship budget relative to tuition costs, but because of the application of a larger, much more diversified, and needier group of able candidates. The scholarship is no longer just an engineering tool; it is a social instrument. We no longer point out an Horatio Alger because there are so many of him. This is an exciting thought.

What have the colleges done about the change? The first step, typically, has been to institute some intra-insti-

Representatives meet informally during registration period before morning session

The scholarship was a useful tool in engineering freshmen to faculty specifications

tutional administrative reforms. These improvements have come from a recognition that student financial aid sources are limited and that scholarships need not be the only response to student need. In the good old days, the generous admissions officer passed out scholarships, the fatherly freshman dean assigned low-rent rooms, the nice old lady in charge of the dining hall selected the new waiters, the gruff but lovable football coach rebated athletic fees, and the understanding treasurer granted high-interest loans to the rare student who applied for one. While these individuals usually exchanged Christmas cards, it can hardly be said that they coordinated their activities. Nor did they often think of embarrassing the student to the extent of asking for a family financial statement, even though they were sometimes uneasily aware that they were not offering help where it was needed most.

Now there has come into being an equally benevolent but more hard-minded individual, the financial aid officer, who attempts to stretch limited college resources by knowing personally the college's needy students and by inspecting student and family resources and budgets. His appropriate recommendations regarding all forms of financial aid are products of the wisdom which comes from his knowledge of the relative needs of *all* candidates for aid as well as *all* available sources of college aid. The creaking machinery of endowed scholarship funds has been sensibly but legally overhauled so that the student need not now apply for the Ebenezer Zebediah Zachariah Brown Memorial Fund Scholarship. He simply asks for *a* scholarship, submits the relevant biographical and geographical data and lets the financial aid officer assign him to an appropriate fund if he wins. The flat tuition or half-tuition scholarship stipend is giving way to the stipend graduated more closely according to need in $50 or $100 increments.

A development this year in addition to, or perhaps as part of, this intra-institutional reform has been a unique inter-institutional experiment in financial aid coordination and cooperation —the College Scholarship Service. To date, the Service has not, admittedly, been much more than a financial transcript service. Yet it has already, it seems to me, accomplished several important things. As the agency of 95 colleges, it has provided far more detailed information on the scholarship candidate to the individual college than the college has felt it could seek heretofore. Again, as a central agency, the Service has been able to follow up unclear statements of fact with impersonal and businesslike propriety, and the parents have responded accordingly. The procedures for scanning and clarifying financial statements have involved a good deal of the human element and have by no means been perfect. As a matter of policy, the Service has not questioned (and probably will not question centrally) the reasonableness or honesty of a stated fact, but only the clarity of the statement. Yet even this has been a step forward, and the colleges are, of course, still free to make credit checks.

In regard to the evaluation of the financial information provided, the Service is only now beginning its systematic studies of the offers of student support made by the 20,000 families which have submitted forms to date. The suggestive *Preliminary Computation Manual*, describing in more detail a system of evaluation outlined at a College Board meeting two years ago by John U. Monro, Director of the Financial Aid Center at Harvard University, has provided a useful point of departure for group discussions about the general problem. The reports of offers to candidates to be submitted by the participating colleges next October will shed additional light on college need-evaluation policies and will provide for the first time accurate information about the effect of such policies on the college-going of a very large number of scholarship candidates. Next year, on the basis of studies made at the Educational Testing Service but more particularly on the bases of the judgments of members of the College Scholarship Service Committee and the advice of a representative group of scholarship officers who will meet in June, the Service hopes to provide to the colleges some sort of index or indices of family ability to pay. It will be well to emphasize at once that such indices should not be thought of as a potential substitute for evaluation by the college but merely as reference figures to be used as part of the local need evaluation.

General agreement

But these actual and potential outcomes of the CSS are essentially mechanical advantages. By all odds the most important outcomes of the Service, it seems to me, have been broader and less tangible. During the course of the present academic year, there have been at least eight different regional groups, representing a total of over 50 colleges, which have met to discuss the problem of evaluation of financial need. Most of these meetings have come about at least as an indirect result of the CSS. While none of the four I attended led me to suppose that there

would ever be anything like complete agreement on the many individual issues which need-evaluation implies (nor, indeed, that there ever should be), it was apparent that the participants were willing, even anxious, to exchange the information necessary to come to general aid agreements which the public can understand.

While any discussion of stipend setting still tends to get back to a case analysis of the mesomorphic scholar who turned down a big scholarship at College A and went with a bigger one to College B, there is a heartening tendency to talk about the number of able students from families with incomes below X dollars who have been enabled to get an education at either A or B. At least three groups of colleges now meet to discuss stipends of common applicants before sending out notices of comparable awards.

There has been considerable interest in the Service outside the present group of 95 formal participants. Twelve College Board member colleges, 37 non-Board colleges, 28 fraternal and industrial organizations, four graduate schools, and three junior colleges have expressed an interest in participating and cooperating. It is likely that the College Scholarship Service Committee, at its May meeting, will recommend that non-Board member colleges and professional scholarship organizations be permitted to participate next year.

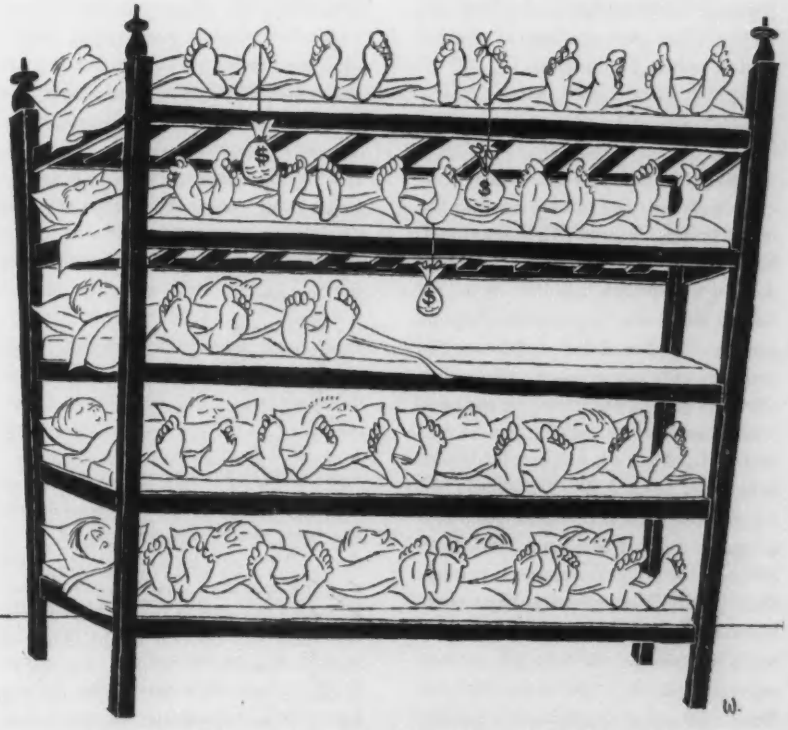
The spirit of cooperation shown by the parents of scholarship applicants has been striking. Except for the very late cases of the last two or three weeks, the CSS forms have been filled out with great care, and responses to follow-up letters have been made with obvious good will. We probably owe more than we know to the schools' efforts to help the parents understand that in order to do financial justice to all individuals the colleges must have detailed information. The schools can also be enormously helpful by explaining to the public that, while the CSS form is used to scale scholarship stipends according to need, scholarship winners are still *selected* on the basis of attainment and promise. We hope, too, that there are now more school thermometers showing numbers honored rather than dollars received. A most heartening talk was given last December by a New Jersey guidance director, who reported that in her community a chart shows the amount of money the community is giving through scholarships to the colleges rather than the amount the colleges are giving through scholarships to students in the community.

Honors and aid

The CSS has received only six letters of complaint from parents in the course of processing 20,000 forms. This does not mean, of course, that there are not many unvoiced complaints. The few who have taken the trouble to write at all expressed the misapprehension that scholarship winners are now being *selected* on the basis of need rather than attainment, a concern which was also expressed in a newspaper column. This suggests that we need more understandable programs of honorary scholarships or "honors at entrance" to supplement our stipendiary scholarships, and, of course, that we need a better program of public information. These improvements will come, for the public and the colleges alike are beginning to recognize a very important development—the enormous financial responsibilities which will be theirs when the tidal waves of students begin to hit the colleges.

Unfortunately, it is only too obvious that greater parental sacrifice and better administration of present college funds alone cannot do the job five and 10 years hence. We are not doing the job now. We are just about supporting the needy youth who actually get to our college doors, and no matter how we rationalize it, we are still helping only *some* of the best of the needy. We are tolerant of the "average" college student only if he is a paying guest. This is not to suggest that we give scholarship support to the average college student, for grants-in-aid, jobs, and loans can be used. But there is, or should be, room in the middle fifths of our college classes for needy students, as well as in our top fifths. There is no question that we place financial restrictions on the college choice of the needy-but-only-moderately-gifted students. As it is, we do not come close to seeing all of the best of the needy. We have not done much more than think seriously about the early identification and special training of gifted students, to say nothing of those who are good, though not specially gifted.

Even if we could identify all the



There should be room for needy students in the middle fifths of classes

A unique inter-institutional experiment in financial aid coordination

youngsters who could most benefit from the best college training, what would it cost to support them adequately in college for a year? Most "conservative" estimates run to over $200 million per year, a staggering sum but well under one-half of one per cent of the annual cost of the cold war and just over one-half of one per cent of annual business profits.

Total need unknown

Actually, it is impossible to arrive at any single estimate of help needed. We really just don't know. This is too bad, because it leads potential corporate donors to advance the "rat hole" or "down the drain" arguments. Anyone who has had the pleasure of seeing the reaction of a really needy student to the news that he has been granted even a no-interest loan will have no doubt that every little bit helps a lot where it is badly needed. We are clearly going to need substantial help from government and/or business, but both business and government are more than justified in expecting that their contributions, whether distributed directly to colleges or through student scholarships, be well administered. Here is where an organization like the CSS can be of substantial help.

I am told that the General Motors Corporation would not have undertaken anything like the substantial scholarship program it has started this year if its board of directors had not been satisfied that scholarships in excess of a $200 prize were to be set according to the relative needs of applicants. Nor was GM prepared to undertake the program if there was not some guarantee that its awards would not be unneeded supplements to other grants. These, it seems to me, are just minimum guarantees that the money is being well spent. A "need" grant is even better public relations than a large, flat grant, and it must certainly be more reassuring to the stockholders. Yet the GM program is almost unique among large, industrial scholarship funds in seeking something more exact than a "need—no need" breakdown for its winners. This year GM is making use of a modification of the CSS form, appropriately revised to exclude item 11, "Please give make and year of any family automobiles." A committee of college financial aid officers will make the actual need estimates, a somewhat expensive process and one which could not or would not be duplicated by many smaller programs, even if enough scholarship officers could be found to spend the time to do the work. This illustrates the enormous job of coordination to be done if corporate scholarships in general are to be used with real effectiveness.

For the past several years, corporations, foundations, and educational associations have been giving considerable attention to the pressing need for coordination of student scholarship grants as well as direct educational grants. It is almost inevitable that in the very near future a national scholarship commission, with substantial assets of its own, will be set up to receive and to administer a large number of corporate scholarship and matching "cost-of-education" grants. The national commission, like the GM program, would have a number of very desirable features: selection of winners by an autonomous group composed largely of educators, free choice of college and field of study by scholarship winners, and matching grants to colleges chosen by winners. It would insist on stipends scaled to need according to the judgment of a financial aid committee, which might well make use of the CSS.

The appeal of such a national commission to industry and colleges alike should be very great. It is likely that winners would be chosen relatively early in the year so that they might think of attending colleges which had previously appeared to be well out of their financial reach. Good unbiased counseling to the perplexed winners would be an extremely important function of the Commission. Winners could be at least strongly *encouraged* to take

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Richard G. King, Assistant Director of the College Board, has been supervising administration of the College Scholarship Service since it began operations last October. Before he joined the staff of the College Board, Mr. King was director of the Office of Tests at Harvard University. Earlier he taught in both secondary school and college and served in the United States Navy Submarine Service.

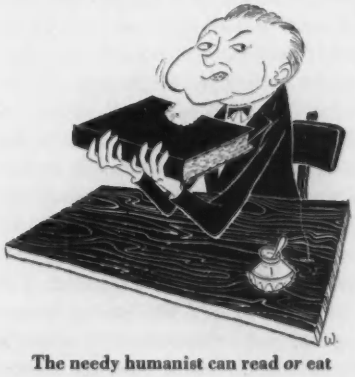
themselves out of the admission and scholarship competition if admitted to the college of their first choice with what appeared to be adequate corporate scholarship support. While the over-all problem of multiple scholarship applications for the CSS group this year is much smaller than expected (an average of less than 2.2 colleges listed per candidate), the problem at high-cost institutions is considerably greater and might be eased appreciably by early decisions.

The need for coordinating industrial awards with each other and with college awards is becoming more and more pressing. The potential nuclear physicist is apt to stockpile scholarships like A-bombs, while his slightly less able humanistic cousin chooses between reading and eating. The timing of announcements of corporate grants and the timing of acceptance deadlines will have to be done with extreme care if an already serious timing problem with college awards is not to be compounded. It will take wisdom and good management to protect but not overprotect the rights of the individual candidate, but a national commission should be able to perform this invaluable service.

Industrialists will be willing and anxious to accede to the wishes of educators, but they will be understandably anxious to have colleges and students make the best possible use of their support. Corporate scholarships, although severely limited in number, are like college scholarships in running the risk of being individually overgenerous. Colleges should feel the obligation to invest enough in financial aid administration to get the best possible mileage from the financial aid gallon.

One of the healthy results of local coordination of financial aid services is to increase the use of loan funds, particularly long-term, low-interest or no-interest funds. The size of an institution's loan program may be considered a good index of the "efficiency" of the total financial aid program. For all our Horatio Algers, we have many able, needy, but somewhat faint-hearted youngsters who are afraid to invest in their own future. As one young Harvard football player once said to me as he faced a large term bill (and Harvard football players are verbal types), "I tell you frankly, Mr. King, I'd rather not take a loan; I'd rather just be indebted."

The able-but-needy many can be given the higher education they deserve, but it will require understanding, sacrifice, and cooperation by colleges, foundations, corporations, parents and students alike.



The needy humanist can read *or* eat

Test prospects for future admissions needs

BY WILLIAM C. FELS

The College Board was founded just 55 years ago at a time when public schools were multiplying and their graduates were seeking admission to college in increasing numbers. Idiosyncratic admissions requirements from college to college showed small differences in the subjects required, in their content, and in the dates on which the colleges offered entrance examinations. As Nicholas Murray Butler said 25 years later, "No secondary school could adjust its work and its program to the requirements of several colleges without a sort of competence as pedagogic acrobat that was rare to the point of non-existence."

Dr. Butler was speaking at the dinner held on the occasion of the twenty-fifth anniversary of the founding of the Board. On that day in 1925, when the representatives of the 35 member colleges and their guests met for dinner at the Park Lane Hotel in New York City, he could look back with pride and say that a great change had been brought about. A desirable uniformity in the subjects offered for entrance, in the content of subjects, and in the dates of examinations had been achieved.

But 1925 may be taken symbolically as the turning point after which the movement began to be away from uniformity. In curricular matters, this was desirable. The *Definitions of Requirements* published by the Board and the past years' tests that it sold, it was complained, placed a dead hand on teaching and on the development of the course of studies. Freedom to change was needed.

But in the administration of tests, the movement away from the relatively unitary June testing to the multiple testing of the present has not been altogether to the good. When I think of our present system of testing, it recalls the Ptolemaic system of astronomy—just before it broke down. It had the earth at its center, and around it the sun, the moon, the planets, and their satellites revolved in circles upon circles upon circles. Each new astronomical measurement required new circles upon circles.

The College Board testing program is now in this state. It starts with the Scholastic Aptitude Test and 14 Achievement Tests. The General Composition Test is a little circle upon a larger circle of the English Composition Test upon the very large circle of the Scholastic Aptitude Test. The Greek Test this year will build a very little circle of Homeric Greek upon a little circle of Attic Greek. Examinations are given on Saturdays in December, January, March and May, and on a Wednesday in August. On all the little Saturday circles except December there are smaller Sunday circles for candidates who cannot for religious reasons be tested on Saturday. This year another little Sunday circle is being added in December. We have a special version of the SAT that is being used for talent searching by the National Scholarship Service and Fund for Negro Students. A similar test has

been developed by the Educational Testing Service for in-state students of the University of South Carolina, which uses the SAT for out-of-state students. And there are Braille and talking-book editions of the SAT for the Blind. If this sounds complicated, it is because it *is* complicated.

Diversity is not bad in itself, in fact, I have said elsewhere that it is the genius of the American system of education. It can, however, become an abomination and an expense to candidates when they are faced with conflicting requirements. For example, two colleges may require different tests, or the same tests on different dates, or different tests on different dates. Nor have we reached the apogee of complexity. The Board voted a September administration at its last meeting, but the colleges were unable to agree on a single date for the testing, so there will be special September administration on different dates at the convenience of the different colleges. There is also a request for evening administrations of the tests for evening colleges.

The problem of numbers is also upon the Board; for each one of these tests and at each one of these administrations there are more and more candidates. Administratively, the testing program is creaking. A year ago last January there were equating problems with the January test scores. Coaching and security problems are becoming aggravated. The number of complaints about administration at centers, though very few, is rising in proportion to the number of new centers and supervisors and the enlargement of old centers.

Temporary solutions

The officers of the Board and of the Educational Testing Service are coping with these problems with more or less success and will be recommending temporary solutions for the immediate problems. A restudy of the SAT has been authorized. Coaching studies are being conducted in the public schools. An inquiry is being made into the "repeater" problem, that of students who take the tests more than once during the year. The possibility of separating the aptitude and achievement programs and offering them on different days is being investigated. Plans are

being made to provide overflow centers where candidates can register for the tests up to the last minute. We hope to simplify fees by absorbing the cost of descriptive booklets on the Achievement Tests in the general fee without raising it. Thus we hope to make the little circles upon circles serve a little while longer, but the time may well have come when we should abandon the Ptolemaic system and turn to a Copernican system.

The Copernican system of astronomy has the sun at its center. The planets move in ellipses around the sun. The satellites move in ellipses around the planets.

In a Copernican system of testing and admission the SAT would be the sun; the Tests of Developed Ability, the planets; and the Achievement Tests and Advanced Placement Tests, the satellites. In point of time, the SAT would come first and be used with school grades for talent identification and for early acceptance and rejection of the best and worst prospects. It would thus be used with school grades as a means of limiting the number of students whose final applications would be considered by colleges using "the full series." The Tests of Developed Ability would come second in time. They would be used with Mathematics tests to make more precise judgments for admission and rough placement. The Achievement Tests would come last. With the Advanced Placement Tests they would be administered to admitted candidates at the end of the year and used for fine placement. Thus testing would move from aptitude to a combination of aptitude and achievement to achievement, from the less to the more precise, from identification to selection to placement.

The administration of the SAT would have to be simplified and extended. Instead of 10 or more administrations a year, there would be one principal administration of the SAT with only such subsidiary administrations as should prove necessary to accommodate stragglers. The principal administration might well be in October. An effort would be made to secure the cooperation of chief state school officers so the test could be given on a school day at all secondary schools to all seniors who might be expected to go to college. Juniors might also be admitted for preliminary testing. The cost of testing would be reduced from six dollars to one dollar or less. The savings necessary to make this reduction possible would have to come from the advan-

tages of dealing with large numbers at one time instead of small numbers on many occasions. There would be savings in test construction, test administration, and in fact, all along the line.

Answer sheets would be sent to the Educational Testing Service which might score them immediately or as requests for score reports came in. In either event ETS would maintain a central repository of SAT scores which could be drawn upon at any time in the senior year by candidates, by colleges, or by schools. A fee would be charged for score reports and this would help to bear the cost of testing.

The usefulness to colleges, schools, and corporations of such a central repository of SAT scores for guidance, admission, and scholarship candidate identification must be obvious to all who work in these fields.

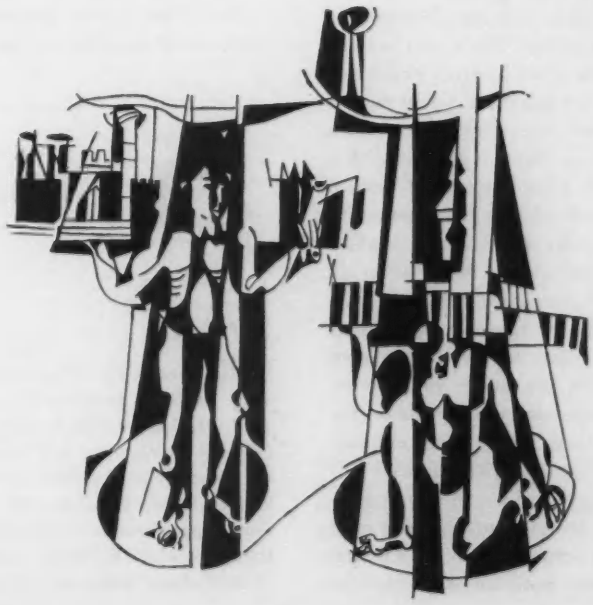
Advanced placement

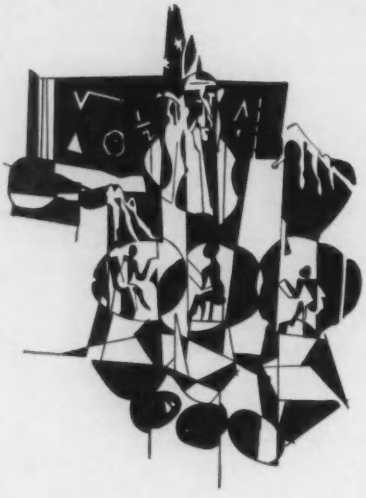
The Advanced Placement Tests mentioned above are coming; candidates will be writing to colleges this spring or next fall to ask whether they will grant advanced standing or advanced credit on the basis of these examinations. The college admissions officers will have to think about this and discuss it with their faculties. Those which are ready for the program will want to take faculty action and prepare statements for their admissions literature. The colleges participating in the School and College Study of Admission with Advanced Standing have already taken faculty action, have agreed to give and actually have given advanced credit on the basis of the Study's examinations. Harvard, Yale, and Radcliffe have also taken faculty action in these matters, and other colleges are considering doing so. School officers will want to make plans and consider whether they wish to introduce the special courses that are necessary for students who will take advantage of the program.

Now, from these testing plans, let us go to some others. The transcript service of the College Scholarship Service has been very successful this year. One of the possibilities it suggested in the very beginning was that of inaugurating a uniform high school transcript service. Since the establishment of the CSS, a number of schools have written spontaneously making the same suggestion. Before the next meeting of the Board in the fall, we hope to be ready with a proposal for a transcript service. It seems now that it would use the same principle that the CSS did in devising its form, that is, would not try to produce a uniform application blank, but to develop a uniform part of an application so that colleges would be free to ask whatever supplementary questions they wished. The form would probably be based on the form recommended by the National Association of Secondary School Principals.

In using the forms, schools would fill them out and file them with the transcript service, which would send copies on the request of the applicant to designated colleges. A number of things remain to be worked out, among them whether to use a checklist, a free-response, or both for the principal's recommendation; whether to charge the candidate, the school, or the college; whether to require that the colleges be listed on the blank as they are on the CSS blank. One of the thorniest problems is whether to use a three-year or a three-and-a-half-year transcript, or if a combination of the two, how to handle this. But basically, the idea seems to be sound, and the reaction to the trial balloon from the schools that have been suffering under the load of producing numbers of different transcripts has been favorable.

The school transcript service would lighten a burden of the schools, but this is secondary in importance to the new possibility it would open of reporting predicted grades or expectancies instead of the standard scores now reported. Large institutions now make validity studies using freshman grades as criteria. On the basis of these studies, the institutions assign weights to school grades and test scores. They sometimes group schools and give different groups of schools different weights according to their experience with students from the schools. After assigning weights they predict the freshman grade-point average each applicant may be expected to achieve, or they may compute his expectancy of achieving a passing mark or higher. From these predicted grades or expectancies rank lists are prepared. It would be technically possible for the Board to skip the stage of score reporting and to report a predicted grade or expectancy for every candidate. Naturally, this predicted grade would be different for each college or, since it might not be feasible to work out a separate equation for each college, for each group of colleges. This would make it possible for small colleges to use the predicted rank lists that only large colleges are now able to produce. It would save a great deal of the time and cost of processing data received by the colleges and thus reduce the load of work in the admissions office





without in any way interfering with the college's right to take other information into account in selecting its class. In so far as it helped with the problem of load, it would also be a partial solution to the multiple application problem.

The other side of this coin is that, if it is possible to give a college a student's predicted grade, it is also possible to give the prediction to the student or his counselor. The possibilities of such a scheme for strengthening guidance in the schools and for avoiding mal-guidance where there are no trained guidance officers seem to make it worth exploring, though it raises difficult public relations problems.

The Board could, in fact, go further with this prediction or expectancy service by reporting to each candidate his expectation of being admitted to a particular college. This would be done on the basis of the previous year's records and the assumption that experiences would not differ greatly from year to year. Thus, a student with a given high school transcript from a given school and with given test scores would be told, for example, that he had 80 chances out of 100 of being admitted to a given college. Whether this would help the multiple application situation is hard to say. The colleges that publish the fullest information about admissions, the reports on the freshman class, report fewer unqualified but more qualified applicants.

Since the Board would be routinely receiving freshman college grades for prediction purposes, there is no reason why it could not routinely report to schools the college grades of their former students who have gone on to college, just as the American Medical College Association now reports to colleges the medical school grades of their former sudents who have gone on to medical school. And the Board could report to colleges and schools comparisons of the grades received in colleges and schools much as the National Registration Office does now for a small number of schools.

Somebody would have to pay for all of this, of course, but if it is useful, someone undoubtedly would.

These two principal plans, the Copernican system of testing and admissions with the October SAT and repository of test scores as its sun, and the predicted grade or expectancy type of reporting with a school transcript service as an important element, would not end the multiple application problem.

Multiple-solution problem

The three aspects of the multiple application problem are the load placed on admissions officers, the difficulty of predicting attrition, and the loss by the college of control over the exact composition of its class. At least seven solutions were suggested at the last meeting of the Board, but none of the solutions was moved for adoption. This is significant and may indicate that none of the solutions, except possibly rolling admissions, is less burdensome than the problem.

The 1948 and 1954 *Annual Reports of the Director* show interesting comparisons between the number of first-choice reports received in 1948 (the last year when candidates indicated choice of college) by the Little Three, the Seven Women's Colleges, and the Ivy League, and the total number of score reports (with choice unknown) received by the same colleges in 1954. The Ivy League colleges received only 2.4 times as many score reports as they had first choices in the last year of the college-choice rule; the Little Three, 2.9 times as many; and the Seven Women's Colleges, 3 times as many. Computation of the average number of test score reports requested by candidates showed that in 1947-48, it was 1.49, and in 1953-54 it was 2.39. In other words, the average candidate is sending out about one score report more than he did six years ago. The increase in the last year was from 2.34 to 2.39, or .05 of a score report. These statistics are offered without hope of reassuring admissions officers about multiple applications during their busiest season of the year and only to explain why the solutions are still more drastic than the problem.

There are some things that it is well to remember about the multiple application situation: load can only be reduced by curtailing applications, and prediction can only be improved, or at least made certain, by requiring choice. At the moment, no one seems to want to take either action badly enough to cause the discomfort that would follow from one or the other.

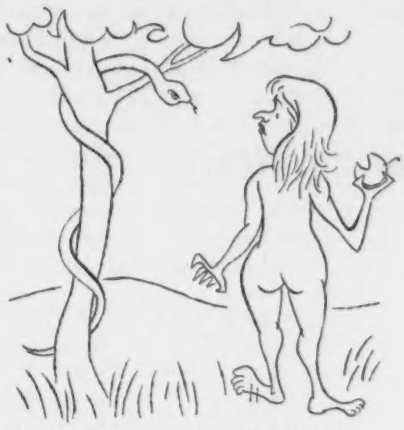
Anticipating the future

These various proposals and plans are presented for consideration at a much earlier stage than they normally would be, because if Mr. Bowles' thesis is true—that we are going to see increasing variety for the college—we must try to break away from the increasingly complex Ptolemaic system of testing and introduce a simple Copernican system. And we must provide both candidates and colleges with information more nearly tailored to the individual differences of the colleges on the one hand, and of the candidates on the other. We must introduce plans such as a transcript service and the prediction type reporting services that will reduce the clerical loads of schools and colleges and strengthen their abilities to guide students.

William C. Fels has been Secretary of the College Board since 1948 and Associate Director since 1952. Previous to 1948 he worked in the Office of Development of Columbia University and as English instructor at Cooper Union. Last year Mr. Fels outlined suggestions for a uniform financial transcript which led to the establishment of the College Scholarship Service.

Modest milestones in the history of testing

BY STANLEY WYATT



The first test was diabolically simple but Eve made a very low raw score

Teachers of the peripatetic school found time tests difficult to administer

Early personality tests lacked incentive, were soon abandoned due to applicant apathy

Ordeal by fire was sometimes used to determine guilt or innocence of accused persons (except pyromaniacs)

Testing the roundness of the earth, Columbus sought the Indies but landed in America, thereby proving the usefulness of multiple choice

Modern testing milestones range from Rorschach's discovery of reactions to spots to many educational experiments conducted by advertisers eager to serve the public

BY JOHN E. DOBBIN

The admissions officer as a consumer of guidance

Suggestions for the use of standardized school test scores submitted with candidate records

From where the college admissions officer sits, the product of high school guidance appears to come packaged in three distinct parts: (1) the candidate himself—a living, breathing, more or less intelligent human organism who desires admission to college; (2) a report of scores earned on College Board tests in a "standardized" examining situation; and (3) communications received directly or indirectly from the secondary school. The student himself is the real "product" of high school guidance, of course, but these other two things may be regarded as "instructions to the user" or as lists of specifications that describe the operating characteristics of the product.

We can define the scope of this discussion at once, in terms of the third part of the candidate package just mentioned—the communications from secondary schools. I shall try to suggest some means by which *certain* of these communications—test scores—may be used to facilitate the admission decision, and then I shall propose two methods by which the college admissions officer can bring about improvement of the quality and usefulness of that information.

Among the school records pertaining to a candidate that counselors and headmasters often send to the admissions office of the college are:

1. The high school academic record
2. The high school activities record
3. Recommendations of the principal or counselor
4. Character references by the candidate's pastor or an alumnus of the college
5. A record of scores earned on tests administered in the high school (other than College Board tests)

This total record, plus the College Board scores and in some cases an interview, represents the evidence upon which the admission decision is based. It is all useful evidence, but not all equally dependable. Some of it, such as the record of school activities and academic success, requires interpretation based on knowledge of local conditions. The admissions officer can learn only "the hard way" just what a straight A average at School X means in terms of accomplishment, or what to expect of a student whom the headmaster has characterized as "outstandingly promising." The usefulness and dependability of these parts of the record, then, are built into a meaningful whole by the admissions officer on the basis of his own experience with individual schools and counselors.

The record of high school test scores, however, can provide a relatively dependable source of useful information for the admissions officer if it can be interpreted. It is with this record of test scores, and the possibility of interpreting and using it, that most of my comments are concerned.

John E. Dobbin, director of the Cooperative Test Division, Educational Testing Service, was formerly College Board Project Director at ETS. His article was prepared originally for presentation to admissions officers at the Colloquium on College Admissions last October and appears in the proceedings of the Colloquium, *College Admissions No. 2.*

Not long ago, an admissions officer received from a large high school in a nearby state a closely typed sheet of paper that purported to be "The Test Record of John Doe," a candidate for admission to his very selective institution. On the sheet were listed 36 scores earned by the candidate in a three-year period on 25 different tests. Each score was given with the name of the test, the date on which it was administered, and the "national public school percentile rank" of the score. Here was a lot of information that looked as if it ought to be useful in deciding whether or not to admit the candidate, but how in the world could it be interpreted so that it would actually be useful? The test results were the product of some very extensive guidance work—but no instructions were given to the consumer.

One manufacturer of ready-to-assemble furniture is reputed to have printed on the bottom of a complicated chair: "When all else has failed, try reading the directions." But in this case there is no single set of directions, no concise instructions for the consumer. Let us see if we can build a set of instructions that will permit understanding and useful application of test score data that are forwarded to college admissions officers by the high school.

Many tests are good

We shall have to start some distance back, taking a look first at the characteristics of tests that are used in the high school for instructional and guidance purposes. Several important characteristics come to mind at once. There are many "good" tests that are not College Board tests—good in the sense of

being appropriate (valid) and dependable (reliable) measures of the student characteristics they are intended to test. Many of them also are technically as sound and just as useful for their own purposes as the Board tests are for admissions purposes. So the tests used by elementary and secondary schools—while they may be different from the Board tests—are by no means "inferior" to the College Board instruments. On the contrary, some of the tests high schools use are a great deal better than the Board tests for a number of educational purposes. (The Board tests are, after all, single-purpose instruments, highly refined.)

Test purposes

A second important characteristic of these "other tests" is their wide diversity. They are constructed by a number of different people and organizations[1]—so the tests are different, one from another, in many ways: in the purposes for which their use is intended; in the content material they use to sample the student's knowledge, skill, or aptitude; in the devices they provide for interpreting the student's performance (scores); and in the samples of the student population on which they are developed and normed. There are other important differences among tests, of course, but let us examine these four for a moment to see how they may be important to the admissions officer.

The major purposes for which tests are used in the high school are:

1. Sorting students into classes or groups for differential teaching or counseling. Generally, this sorting is according to capacity or aptitude for academic learning. On the basis of the sorting the teacher adjusts his instruction to the intellectual ability of the student and the counselor helps the student to set realistic educational goals for himself. Tests built for this sorting purpose include the "intelligence" tests like the Otis Mental Ability Tests and the Henmon-Nelson Tests of Mental Ability, and the "academic aptitude" tests like the American Council on Education and the Ohio State psychological examinations. Thumbnail sketches of 11 of these well-known sorting tests appear on page 22.
2. Measuring academic progress. Achievement tests are used by the millions in high schools—to estimate "where the student is" so that instruction may be suited to his need, to assess the effect of instruction by fore-and-aft testing, to permit evaluation of instructional method or content, and (alas!) to check up on teachers. Some tests are designed to measure academic progress in terms of generalized learnings—such tests as the Iowa Tests of Educational Development and the Cooperative General Achievement Tests. Most tests, however, go right down the line with academic course content and are pretty strictly measures of informational learning—such tests as the Cooperative tests in the subject fields, the Essential High School Content Battery of the World Book Company, and others, some of which are listed on page 23.
3. Helping students to choose appropriate occupational goals. Measures of vocational interest or preference are used in great quantities in high schools. These measures are not "tests" in the usual sense, but they do help young people to straighten out their thinking with respect to the choice of their life's work. The Strong Vocational Interest Blank and the Kuder Preference Record are the two most widely used instruments of this kind. A brief description of them appears on page 23.

So far as the admissions officer is concerned, I think, tests of the first two types—the sorting tests and the achievement tests—are more likely than any others to be reported to the college by the high school. Of the 36 test scores on the report sheet mentioned above, seven were sorting scores (IQ's and such) and 29 were achievement scores. In getting to know the meaning of assorted test scores, therefore, I think we can afford to concentrate on scores from tests built for these two purposes. Having identified tests with two different purposes in which we are interested, let us note some of the other important differences among tests.

Differences of content

The content differences among tests—even among tests built for exactly the same purposes—are very great. Take the so-called "intelligence" tests for example. One test will take a lot of very small samples of a student's skill in a variety of intellectual tasks—such things as figure-matching, synonyms,

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[1] (1) Acorn Publishing Co., Inc., Rockville Centre, New York
(2) Bureau of Educational Measurements, Kansas State Teachers College of Emporia, Emporia, Kansas
(3) Bureau of Educational Research and Service, State University of Iowa, Iowa City, Iowa
(4) Bureau of Publications, Teachers College, Columbia University, New York 27, New York
(5) California Test Bureau, 5916 Hollywood Boulevard, Los Angeles 28, California; 110 South Dickinson Street, Madison 3, Wisconsin; 206 Bridge Street, New Cumberland, Pennsylvania; 2114 Irving Boulevard, Dallas 7, Texas
(6) Center for Psychological Service, George Washington University, Washington, D. C.
(7) Cooperative Test Division, Educational Testing Service, 20 Nassau Street, Princeton, New Jersey; 4640 Hollywood Boulevard, Los Angeles 27, California
(8) Educational Test Bureau, Educational Publishers, Inc., 720 Washington Avenue, S. E., Minneapolis 14, Minnesota; 3433 Walnut Street, Philadelphia 4, Pennsylvania; 2106 Pierce Avenue, Nashville 5, Tennessee
(9) C. A. Gregory Co., 345 Calhoun Street, Cincinnati 19, Ohio
(10) Houghton Mifflin Co., 2 Park Street, Boston 7, Massachusetts; 432 Fourth Avenue, New York 16, New York; 2500 Prairie Avenue, Chicago 16, Illinois; 715 Browder Street, Dallas 1, Texas; 500 Howard Street, San Francisco 5, California
(11) Ohio Scholarship Tests, Ohio State Department of Education, Columbus, Ohio
(12) Personnel Press, Inc., 180 Nassau Street, Princeton, New Jersey
(13) Psychological Corporation, 522 Fifth Avenue, New York 36, New York
(14) Public School Publishing Company, 204 West Mulberry Street, Bloomington, Illinois
(15) Science Research Associates, Inc., 57 West Grand Avenue, Chicago 10, Illinois
(16) Sheridan Supply Company, P. O. Box 837, Beverly Hills, California
(17) Stanford University Press, Stanford, California
(18) C. H. Stoelting Co., 424 North Homan Avenue, Chicago 24, Illinois
(19) World Book Company, 313 Park Hill Avenue, Yonkers 5, New York; 2126 Prairie Avenue, Chicago 16, Illinois; 6 Beacon Street, Boston 8, Massachusetts; 441 West Peachtree Street, N. E., Atlanta 3, Georgia; 707 Browder Street, Dallas 1, Texas; 121 Second Street, San Francisco 5, California

number series, and vocabulary. Another test will measure the student's skill with antonyms and analogies only, but in larger samples (longer subtests). Still another test will measure intelligence along yet another plane. All are intelligence tests and about equally predictive of school success, but they are measuring different skills and their scores cannot be equated.

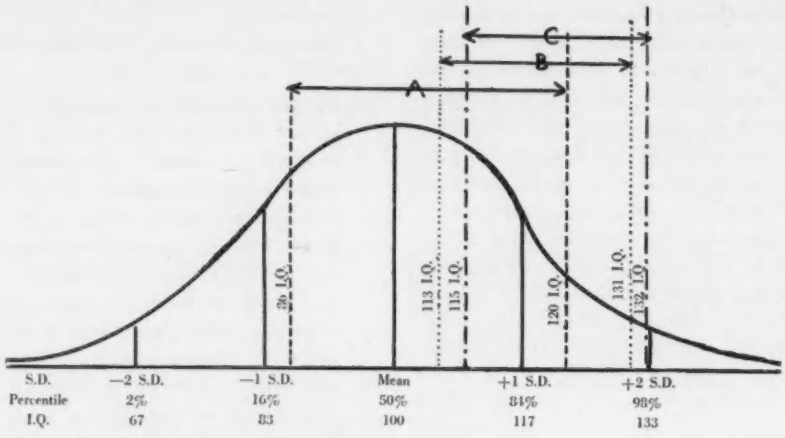
The same kinds of differences in content characterize the achievement tests. One test in such a field as English, for example, will give emphasis to recall and application of structural rules, while another will bear down heavily on usage or interpretation. Each test may be a "good" test, but it measures the student according to a different dimension from that measured by any other test.

This much can be said of the test scores earned in high school: Because each test is different in content from every other test, even within one subject field, the student does not earn an "English score"—or a "social studies score" or a "science score"—but rather earns a score *on a particular test*, or sometimes even a *particular edition of a particular test*.

The elastic IQ

Now, as to differences among tests in the "scores" they produce, it is a fact that there is variety in test scores. They are hurled at admissions officers constantly—IQ, Percentile Rank, Index of Brightness, C-Score, Scaled Score, Standard Score, Stanine, Deviation IQ, T-Score, and all the rest, They are all simply test scores, but for some obscure reason test builders feel that the name of their particular test score must somehow convey to the user a feeling of assurance that *this* test score is based on statistical razzle-dazzle that makes all other test scores somewhat old hat. True, some kinds of test scores are easier to manipulate than others when one has to pool them or distinguish among them with precision, but for most users in school, tests need only separate the highs, mediums, and lows. So it is important to remember that whatever impressive name is hung on a test score, it is still just a test score. Even the IQ is nothing more. The fancy tag just hints at the arithmetical process by which the score shows the standing of one student in relation to all others who took the test.

Some comparisons between College Board candidates and other student groups, in scholastic ability



Curve represents total population of 18-year-olds.

A — Middle half of general high school senior population.
B — Middle half of independent school senior population.
C — Middle half of College Board candidates.

Let's consider the characteristics of one of these test scores to see what it's like, and just for old time's sake let's make it the IQ. About 40 years ago there appeared in our folklore the notion that an IQ is something one "has" like large feet or a bass voice—and there is nothing to be done about it. Furthermore, according to the folklore, some very psychological tests can be used to tell you just exactly how much of this IQ you have, only you must never know how much if you have a lot, because it will warp your perspective, nor how little, if you have very little, because you will become discouraged. And this odd notion has remained current to this day, even—nay, particularly—among educated people. I wish we could somehow throw away the whole IQ concept—blot it out of our records, our textbooks, and our recollection—for it stands in the way of our properly understanding young people and how they mature. The IQ is only a test score—differing in meaning from test to test, from age to age, from school to school. The IQ has meaning only when one knows the exact nature of the test on which it was earned, the age of the student when he took the test, and the population on which the test was standardized. And "meaning" here means that the student has better than a 50–50 chance of earning an IQ within four or five points of his first score if he takes the same test a second time.

Allow me to quote some IQ "equivalents" reported by the Educational Records Bureau. These are score equivalents worked out by ERB from data obtained by administering the Stanford-Binet individual tests and four group tests of intelligence to large numbers of children. At the higher end of the scale the "equivalents" read like this:

Stanford-Binet IQ = 168
Henmon-Nelson IQ = 160
Otis IQ = 142
California IQ = 148
Kuhlmann-Anderson = 170

Here is a spread of 28 IQ points on a scale of "equated" scores among five intelligence tests. It is true that variations among tests are smaller in the middle or average range of scores, but College Board college admissions officers are dealing with young people whose IQ scores are in the range of 115 to 180 and up. The ERB data indicate a spread of 13 points among five equated IQ scores at the level of 115 on the Binet, 12 points at the level of 125, and 16 points at the 140 level.

These variations in IQ's do not reflect any special weakness in the IQ as a score, but rather indicate some-

thing that is characteristic of all test scores. Some of the variation is due to the nature of the tests themselves (perhaps the sampling of intellectual skill is too narrow or too small in one or another of them); some of it is due to the nature of the human beings who are measured (no one ever reacts in exactly the same way to a test on successive occasions); and a great deal of it is due to differences in the populations on which tests have been built and normed. This leads us to perhaps the most important difference among tests from the admissions officer's point of view.

Creating the norms

Differences among tests in their population bases cause perhaps the most startling variations in score values. It is these differences, too, that cause test users to encounter problems that sometimes "sour" them on testing. It all comes about something like this. Publishers of most tests talk about a "national norm" and encourage the users of their tests to believe that they can compare the scores of their own students against a scale that represents a national average of scores. This is a vicious delusion, for there is no such thing as a national norm for any test. There never has been such a thing—there is not now, and probably never will be. What publishers ought to say—instead of "national norm" is "standardizing sample for this test." Why is this so?

There is undoubtedly a fairly normal distribution of—academic ability, let us say—among all the 12-year-olds in the country. The scores earned by a random sample of all the boys and girls in this total group could be used to compute a true "national norm" on an academic aptitude test for 12-year-olds. But publishers ordinarily do not obtain a random sample of these youngsters because the children of very lowest ability are not in school, and the only practical way to obtain their scores is by administration of the tests in school—so we cut off the very bottom of the total distribution. The next possibility, then, becomes a "national norm for children in school." That really would not be so bad, but then we encounter the fact that at least a third of the schools in the country do not use tests, in fact, cannot afford to buy decent seats, books, teachers, or tests. Many of the underprivileged third will not have tests as a gift, either, because they shrink from comparison in quality with other schools. And one can't blame them. So we cut off the distribution of talent some more by eliminating the schools that cannot be reached in a standardizing program for a new test of academic ability.

What we have left to get a sample from is "children in schools that use tests." Not even that is sampled randomly. Most test publishers, for very compelling economic reasons, seek to have their standardizations partially paid for by the sale of the test materials at a reduced price. They offer to sell the tests to the schools for the cost of printing (25–50 per cent of the usual list price) if the schools will return test papers or scores for use in the computation of norms. So now we have norms based on "children in schools that use tests and are willing to buy this particular test." And the end is not yet.

In order to obtain a sample that is large enough to impress the public, or larger than a competitor's sample, most publishers seek to sell these reduced-price tests for norming to larger school systems. A city with 7,000 12-year-olds will supply a larger number of cases, for the amount of effort involved, than several rural school districts with only 200 12-year-olds each. So here we have the population that the publisher samples to get his "national norm"—12-year-olds in school, in schools that use tests, in schools that will buy *this* test, mostly in cities of 100,000 population or more. What the publisher obtains from that population, even if he samples it very carefully, is not a "national norm." I am not criticizing the standardizing tech-

Some estimates of the relationships among scores on various measures of scholastic ability

1. College Board SAT-V Scores	2. ACE-College Ed. Freshman Percentile	3. ACE-H.S. Ed. Senior Percentile	4. General Population Age 18 Percentile	5. IQ Group Test	6. AGCT Scores
800					
775					
750					
725					
700					
675	99	99			
650					
625	90				
600				130	
575					
550					
525	80	90			
500	70			125	130
475			90		
450	60	80			
425					
400	50	70	80	115	120
375					
350	40	60	70	108	115
325	30	50	60	104	
300	20	40			
275			50	100	
250					
225	10	25			
200					

..... *Material above this line of special interest to the admissions officer who admits students with SAT-V scores of 600 or higher.*

— — *Material above this line of special interest to the admissions officer who admits students with SAT-V scores of 500 or higher.*

— · — *Material above this line of special interest to the admissions officer who admits students with SAT-V scores of 400 or higher.*

nique here, for I am painfully aware of the conditions that make this sort of thing necessary, but I feel strongly that the norms published with tests should not be described as "national norms."

All this has an important implication for the admissions officer who wants to add high school test scores to the fund of information he accumulates for each candidate prior to admission. If every test is based on a different population, how can he assess the scores that are reported to him? Fortunately, there are some circumstances that favor him.

For one thing, the test scores reported to the college almost always have been earned in the senior high school. This makes possible the assumption that the test norms are based on a population which can be defined. There are some variations within this definition that we need to watch for, but they are not too difficult to ascertain. Most test publishers usually seek to include a number of "comprehensive" high schools in the standardizing populations for secondary school achievement tests. This produces a "norm" that probably is fairly close to average for all students "in senior high schools that will buy tests, etc. . . ." but such a norm on an academic achievement test will favor the students in an academic high school. If the norms on an English test include the scores of several thousand seniors in vocational curricula, other seniors in strongly academic high schools are going to find it easy to surpass those norms.

Comparison of scores

Because of differences in sampling practice, it is possible to say that Cooperative achievement tests generally have been normed in academic high schools and are the most "difficult," that is, the average youngster will find it more difficult to earn a score above the fiftieth percentile. World Book Company high school achievement tests have been normed on total groups a little less academically "loaded" and are slightly less difficult. California Test Bureau tests have been normed on a total group that includes many California public high schools—in which social and personal growth receive a lot of attention—so they are considerably less difficult. These differences are not cited as criticisms, but simply as differences to watch for. You should know that most of the Cooperative achievement tests make average California public high schools look bad, and that the better independent schools of the East "jump out the top" of the California achievement test norms for high schools—on academic tests.

Now let us pull all these words together and see what they add up to that

Group tests of academic aptitude

The number in parentheses following each test title indicates the publisher of the test, given in the alphabetical list of test publishers in footnote, page 19.

American Council on Education Psychological Examination for College Freshmen (ACE-College) (7)

A widely used measure of academic aptitude, one hour long, yielding a linguistic (L) score, a quantitative (Q) score, and a total (T) score. Standardized on a large group of students in colleges that are *non-selective* in admissions. Percentile rank score interpretations. ACE scores often are reported without notation as to whether they are scores earned on the college edition or the high school edition. This *must* be known before scores or percentiles can be interpreted.

American Council on Education Psychological Examination for High School Students (ACE-H.S.) (7)

This is a test much like the college edition, mentioned above, but slightly shorter. Standardized on students in high schools that tend to be somewhat more academic and college preparatory than the average, making the test a little more "difficult" than some others for average high school students.

Again, scores on this test *must* be distinguished from scores earned on the college edition.

Army General Classification Test (AGCT) Civilian Edition (15)

This is one of the early forms (1940) and *not* the AGCT used for the classification of inductees during World War II. Difficulty in identifying the form used with any particular case reported, and the need to hunt down the data and characteristics of that form among many forms, make specific interpretation of a single score hazardous. The publisher says that a "score below 70 indicates a poor educational risk" and a score above 130 indicates a person who "should be offered as many educational opportunities as possible" (in top 9% of 1940-1944 Army inductee group).

California Test of Mental Maturity — Short and Long Advanced Forms (5)

A popular test of mental "factors" that yields language IQ's and non-language IQ's as well as a total IQ for all factors measured. Publisher reports a median IQ (total) of 105 among high school seniors and 110 among college freshmen.

Henmon-Nelson Tests of Mental Ability — High School Examination (10)

A short and easy-to-use test of 30 minutes yielding IQ's and percentile ranks by age and grade.

Kuhlmann-Anderson Intelligence Tests (12)

One of the better group tests of general academic intelligence — although it is more difficult than most to administer and score — yielding a Binet-type IQ.

Ohio State University Psychological Examination — Form 21 (15)

A highly-regarded test of *verbal* abilities found to be related to academic success, yielding both a total score and a reading comprehension score. Interpretation is by means of percentile rank in grade.

Otis Self-Administering Test of Mental Ability — Higher Examination (19)

A popular and easy-to-use test of 20-30 minutes in length, yielding a single score expressed as an "IQ" or an "Index of Brightness." Maximum IQ's for high school seniors and college freshmen are in the low 130's. Reported median IQ for high school seniors is 103, for college freshmen 111.

Otis Quick Scoring Mental Ability Tests — Gamma Test (19)

A still-easier-to-use 30 minute test very much like the "self-administering" form, yielding a single "IQ" score.

SRA Verbal and Non-Verbal Forms (15)

A short and highly speeded test yielding two part scores (Q and L) and a total score. Interpretation of scores by percentile rank and reference to a dubious set of "occupational ranges" in a job chart. Percentile scores may be generally interpreted as referring to a sample of the general population.

Terman-McNemar Test of Mental Ability (19)

A wholly verbal test of 40 minutes yielding standard scores and "deviation" IQ's. The standardization data have been treated to make them reflect, as nearly as is possible, the performance expected of the general population.

is worthwhile for the admissions officer. The table on page 21 is a picture of a test publisher way out on a limb. This is the sort of thing that makes a respectable test technician turn pale. What we have here is a *very* rough table of test score relationships. Column 1 is the reference scale, since the Verbal score on the Scholastic Aptitude Test is a score many admissions officers have for every student and a score that has meaning for them. Column 2 is a percentile rank scale for the college ACE. Right away we can see a difference in the norming sample; the candidate who is exactly at the average of ability in the SAT-V group (500 SAT) is roughly in the top third (70 percentile) of the ACE College Freshman group. Now look at Column 3. The same candidate with a score of 500 on SAT-V is likely to have an ACE-High School score in the top 15 per cent. And then look at Column 4, which is a guess at the percentile rank equivalents for a group including all 18-year-olds!

With a warning that this table of relationships is necessarily composed of very gross approximations, we can use different types of broken lines to see how the table might be used by an admissions officer. The admissions officer who admits only candidates with SAT-V scores of 600 and higher can see roughly how high his freshmen ought to score on the other tests that are reported to him by looking above the dotted line. The information above the dash line is of interest to the college that admits students with SAT-V scores of 500 or better, and the dash-dot line sets off percentile rank scores roughly equivalent to SAT-V's of 400 and up. This crude table can be used in the following way by admissions officers whose entrance standards or goals are in terms of the SAT. The SAT, good as it is, is just one test. They can use the other test scores reported to them, to support or throw doubt on the SAT, by categorizing them roughly with the help of the table.

Suppose that a college tries to limit its admissions to students with SAT-V scores of 500 and higher. Along comes a highly recommended candidate with an SAT-V score of 450 and a lot of test scores from his high school. Using the test descriptions which appear on page 22 and the appropriate column of the table (probably Column 3), the admissions officer finds that the candidate pretty consistently has earned scores in the top 10 to 15 per cent on high school aptitude and achievement tests. Such an observation may help the admissions officer to decide that this student is capable of playing in the same league with the college's other freshmen. On the other hand, if this candidate has earned high school achievement test scores down near the middle of the high school distribution

Group tests of academic achievement

The number in parentheses following each test title indicates the publisher of the test, given in the alphabetical list of test publishers in footnote, page 19.

Cooperative General Achievement Tests (7)
Three separate 40-minute tests measuring "general proficiency" in the fields of social studies, natural science, and mathematics. Scaled scores are provided, but they have meaning only when expressed as percentile ranks among high school senior or college freshman populations.

Essential High School Content Battery (19)
Four separate (or combined) "contest" tests in the principal fields of high school study — mathematics, science, social studies, and English. Standard scores are provided, by field, which may be translated into percentile ranks by grade.

Iowa Tests of Educational Development (15)
A highly regarded battery of *nine* tests that is sold to high schools in a "program package" that includes scoring and interpretation of scores. The tests in the battery stress application and interpretation of knowledge rather than recall of information. Scores are reported as percentile ranks by grade.

United States Armed Forces Institute (USAFI) Tests of General Educational Development — High School Level, Form B (Veterans' Testing Service, Chicago)
A group of five separate tests, of two hours each, that were constructed originally as "high school equivalency" examinations. They stress skills of interpretation and application in five high school subject fields. Standard scores are provided, as well as percentile rank equivalents.

Cooperative English Tests — Higher Level (7)
A two-hour battery of combined or separate tests in three major areas of English, including reading comprehension. Scaled scores are reported and may be expressed as percentile ranks in Grades 11 or 12, or percentile ranks among college freshmen.

Cooperative Tests in high school subjects (7)
This publisher sells subject-matter achievement tests in English, French, Latin, Spanish, mathematics of several levels, science in major fields and social studies specializations. In general, these are 40-minute tests of highly factual nature, yielding scaled scores or raw scores which may be translated into percentile ranks for high school classes. These tests usually are regarded as "difficult" — in terms of the numbers of students who earn below average scores — by all but the most academic high schools.

Evaluation and Adjustment Series (19)
This is an "integrated" series of separately constructed tests that yield scores related to a single interpretative scale. Tests in the several high school fields are bought and used separately. They tend to be "academic" in content in the same sense that the Cooperative Tests are, but generally are carefully done. Standard scores, which may be interpreted as percentile ranks in grade, are provided.

Group measures of interests and preferences

Kuder Preference Record — Personal (15)
Made up of five scales describing different types of personal and social activities. The student's score on each scale is based on the proportionate number of such activities he indicates that he likes most in a long list. This score is then compared with the "preferences" of certain vocational and professional groups in the validitating sample. Percentile scores earned on this inventory are related *only* to the interpretative data included with the inventory and must *not* be interpreted according to any generalized "norms."

Kuder Preference Record — Vocational (15)
An inventory of the same type as the *Personal* record mentioned above, but directly related to preferences for certain activities that characterize *jobs*. Again, the percentile scores can be interpreted *only* on the basis of normative data in the manual.

Strong Vocational Interest Blank (17)
This well-known inventory of interests has separate scales for men and women. As with other "interest" and "preference" inventories, high scores indicate only a similarity in interests between the student taking the test and certain vocational groups; high scores do *not* indicate either aptitude or capacity. For assessment of interests, however, both the Strong and the Kuder inventories have useful applications.

SECONDARY SCHOOL TEST SCORE RECORD

Name of Student: _____ Age _____ Date _____

High School or Preparatory School: _____

Rank in Senior Class: _____ Size of Senior Class _____

Person preparing or transmitting record —

Name: _____

Title: _____

Institution: _____

Name of Test	Grade When Taken	Level or Edition†	Form	Score*	Standardization Population**	%ile Rank
A. *Scholastic Ability and Intelligence Tests*						
1. _____						
2. _____						
B. *Achievement Tests — General*						
1. _____						
2. _____						
C. *Achievement Tests — Subject Fields*						
1. _____						
2. _____						
D. *Interest or Preference Measures*						
1. _____						
2. _____						

* Higher Level, Advanced Examination, College Edition, etc.
** High school seniors, college freshmen, etc.
† Raw score, scaled score, I.Q., etc., and indicate which — as "raw score 72," "I.Q. 118."

(say in the 60–70 percentile range) the college may want to pass him by. A candidate with a borderline SAT score and only a mediocre achievement test performance in high school (by individual standards) may not be a good bet for admission. And so it goes. The broken lines on the table show crudely the percentile rank scores on high school tests that probably are in the same academic category as certain ranges of scores on the College Board tests. Again, this comparison is very rough but it may be useful.

Now, of course, the admissions officer is faced with still another problem. How is he going to obtain test scores which will be reported to him in such a way that he can use the directions and the table? There *is* a way. The chart on page 24 suggests a reporting form of a kind that will produce the necessary information. Any admissions officer can write his own script for the identification information at the top—and even fill in some test titles in the body of the form if he wants to. The six columns calling for specific score data constitute the important part of the form. Information reported in these columns will permit him to put the percentile rank score on any high school test into the table on page 21 for rough comparison with his standards.

This suggested score report form constitutes the first of the two bits of advice I promised at the opening of the discussion. If the admissions officer sends the test record form to the high school which customarily reports test scores to him—or politely returns it with scores reported in some other way—the high school counselor will know what a college wants to know about the scores he reports. Nothing called for on this sheet is difficult for him to obtain, in fact, he should have all this information in his own records. I suspect that most counselors will be glad to receive such a form from college admissions officers for score reporting services, for without it they must attempt to guess what kinds of information are wanted and can be used. So, if the admissions officer wants to make use of the very pertinent information in high school test scores and to become a very efficient consumer of this part of the guidance product he must help the high school counselor to give him exactly the information he needs and then *use* this information to fill out his picture of the candidate.

Colleges can cooperate

I have saved my only controversial suggestion for my concluding paragraphs. There is one way in which college admissions officers can simultaneously improve secondary school academic guidance and their own skill as consumers of that guidance. That is by letting the high schools know the test score characteristics of the freshman class they admit. The counselors or headmasters in a few prep schools, because they send many candidates to certain colleges each year, have been able to deduce the lower limits of SAT score ranges among admitted candidates in some colleges. Most counselors only know, however, that certain kinds of colleges have "high" or "medium high" standards, and many of them don't know by what scale to assess the meaning of "high."

Therefore, if college admissions officers want to improve the quality of high school guidance and of the guidance product itself, I strongly suggest that they publish in the *College Handbook*, along with tuition fees and entrance requirements, the median and quartile SAT scores of the freshman candidates they have admitted in the past.

3 *publications for schools and colleges*

College Admissions 2

College Admissions No. 2 (just published) reproduces in print the second annual Colloquium on College Admissions—the four-day "school for admissions officers" at which 90 College Board member colleges were represented.

This book carries forward the examination of basic aspects of college admissions begun in the discussions of the first Colloquium, which were published in the first volume of the series, *College Admissions (No. 1)*.

College Admissions No. 2 focuses generally on the sorting factors that determine *which* students seek and gain admission to America's colleges. The effects of home and social influences, population pressures, psychological encouragements or obstacles, methods of personal assessment and guidance, college admissions policies, and financial aid practices are specified and evaluated.

Fresh views of this great sorting process suggest new ways for the college, the school and the community to discover, stimulate, and assist the able student. Detailed procedures are offered for the appraisal of the candidate's personal and intellectual characteristics and the solution of his financial problems.

In considering these factors, some of the studies explore further or treat different aspects of areas of discussion introduced in the first volume.

($3.50 per copy)

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College Admissions (No. 1) includes each discussion of the first Colloquium, preserving the continuity and progression of ideas implicit in the Colloquium program. It starts with analyses of population factors and their relation to college planning for the next 10 years, proceeds to the determination of admissions policies as affected by the aims and requirements of both schools and colleges, describes specific methods of evaluating the academic, social, and emotional characteristics of college candidates, and considers in detail the administration of admissions, including student recruitment, the function of application forms, the processing of applications, and the responsibilities of admissions officers to both their institutions and to candidates. ($3.95 per copy)

Freshman Admissions Forms and Letters

Freshman Admissions Forms and Letters is a 350-page collection of the forms and communications used by each of 12 colleges in its admissions process. The forms (reproduced with explanatory notes) follow the procedure used with the applicant through all steps from the time he makes an initial inquiry about admission, to the college's final notification to him of acceptance or rejection.

Some of the colleges utilize up to 50 such forms and letters in variations of their methods of gathering adequate information on an applicant and processing his application, including school transcripts, principal's reports, health records, confidential interview reports, forms used in the college admissions office, and letters of transmittal, inquiry, acknowledgment, acceptance, rejection, etc.

The 12 institutions represented, which were selected because of their differences in size, location, auspices, and purposes are: Brown, Carleton, Cornell, Manhattan, Massachusetts Institute of Technology, Mount Holyoke, Princeton, Rensselaer Polytechnic Institute, Stanford, University of Michigan, Wells, and Williams.

This book is useful alone, or as a supplementary reference tool to either or both of the *College Admissions* volumes. ($3.00 per copy)

To College Entrance Examination Board
Box 592, Princeton, New Jersey

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____copies *Freshman Admissions Forms and Letters* ($3.00) ____
Enclosed is (Total) $____

Name_____

Address_____

Institution_____

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Name of Student: _____ Age _____ Date _____

High School or Preparatory School: _____

Rank in Senior Class: _____ Size of Senior Class _____

Person preparing or transmitting record —

Name: _____

Title: _____

Institution: _____

Name of Test	Grade When Taken	Level or Edition†	Form	Score*	Standardization Population**	%ile Rank
A. *Scholastic Ability and Intelligence Tests*						
1. _____						
2. _____						
B. *Achievements Tests — General*						
1. _____						
2. _____						
C. *Achievement Tests — Subject Fields*						
1. _____						
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Enclosed is (Total) $

Name

Address

Institution

NEWS OF THE COLLEGE SCHOLARSHIP SERVICE

First year finale

21,000 statements: By the middle of May the College Scholarship Service had received more than 21,000 financial statements from the parents of scholarship applicants, 18,460 at its Princeton office and 2,996 at Los Angeles. As the end of the academic year approached, the average number of colleges named by the parents to receive copies of their statements declined slightly, reducing the over-all average for the year's operations to 2.13 copies at Princeton and 1.98 at Los Angeles. The January figures were 2.39 and 2.41 respectively.

During the year, as reported by Richard G. King on page 11, only six letters expressing objections to the CSS were received from parents. All of them reflected a misunderstanding that colleges participating in the Service are selecting scholarship winners on the basis of need rather than for accomplishment and promise. The CSS has emphasized from its beginning last fall that scholarships will continue to be awarded according to ability, as honored by the individual college, but that the dollar value of an award should be determined by the actual financial need of the student. The intent of the Service is to stretch available scholarship money as far as it will go without exerting undue financial pressure on any student or family, thus making it possible for more students who are highly qualified to go to college.

General appraisal: Scholarship officers of 73 of the 95 colleges participating in the CSS met in New York on April 5 for a general review and discussion of the first year's operations. Among the topics were an item by item consideration of the financial form itself, the Parents' Confidential Statement in Support of Application for Financial Aid. Many suggestions will be incorporated in the revised form to be distributed next fall.

The representatives also stressed the importance of informing students and parents that the financial statement does not constitute a scholarship application. An application for financial aid should be secured from each college to which the student intends to apply for assistance. The CSS form, on the other hand, should be filled out only once, since copies are sent by the Service to those colleges named by the parents.

General Motors use: By special arrangement, the CSS was used for the first time by a sponsored scholarship program when 100 General Motors national awards were made in May.

The winners were selected by a committee of seven admissions officers and approved by a committee of seven college presidents serving as trustees of the program for GM. Stipends ranging from $200 to $2,000 were then determined by a committee of seven scholarship officers using information provided by the students' CSS statements and the colleges of their choice. A condition of the GM awards which emphasizes their nature as financial aid instruments is that winners may not accept a total of more than $100 in additional scholarships.

For those who asked

A stiff-cover ring binder, 11 inches wide by 12½ high with 1 inch capacity will hold 12 copies of the current *Review*. If not available at your local stationers, it can be obtained in canvas binding at $2.24 each, plus parcel post (mailing weight, 3 pounds) by ordering Agate Ring Binder 5146 from Goldsmith Brothers, 77 Nassau Street, New York 8, N. Y.

Preparation for 1955-56

Under consideration: The College Scholarship Service Committee scheduled a meeting on May 20 to consider plans for activities in the next academic year. Among the items requiring attention were a revised procedure for the computation of financial need, the offering of CSS facilities to colleges which are not members of the College Board and to other scholarship sponsors, and studies of data collected during the first year.

Increased participation: Non-member colleges and scholarship sponsors which have expressed interest in the CSS have been notified of the regular conditions of participation and have been requested to decide whether or not they would wish to take an active part in the Service under those conditions. These include the exchange of information on scholarship matters with other participants and the requirement that parents of candidates applying for financial aid because of need file a financial statement with the CSS. At the end of each year the Service receives reports of all financial aid, whether outright grants, loans, compensation for employment, free room, or other considerations. It then reports to each college all offers made to its candidates by other participating colleges, indicating where the candidates finally enrolled.

Computation research: Several projected studies of the reports of offers and awards to be submitted by colleges at the end of this academic year will assist the CSS to plan how it may revise the method of computing need which was provided to colleges last fall. It is also hoped that the data will make it possible for the Service to provide colleges with estimates of the amount each applicant's family may reasonably be expected to provide toward his college education. The research will involve preparation of experience tables in which the amounts of support offered by families will be studied in relation to such factors as number and age of dependents, income, location and size of home community, parental occupation, and other information provided by the financial statement.